



# ALMOSTAFA /N MATHEMATICS



2024

4  
Primary

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 0111 90 62 132







# Multiplication Tables and Charts



$1 \times 1 = 1$   
 $1 \times 2 = 2$   
 $1 \times 3 = 3$   
 $1 \times 4 = 4$   
 $1 \times 5 = 5$   
 $1 \times 6 = 6$   
 $1 \times 7 = 7$   
 $1 \times 8 = 8$   
 $1 \times 9 = 9$   
 $1 \times 10 = 10$   
 $1 \times 11 = 11$   
 $1 \times 12 = 12$

$2 \times 1 = 2$   
 $2 \times 2 = 4$   
 $2 \times 3 = 6$   
 $2 \times 4 = 8$   
 $2 \times 5 = 10$   
 $2 \times 6 = 12$   
 $2 \times 7 = 14$   
 $2 \times 8 = 16$   
 $2 \times 9 = 18$   
 $2 \times 10 = 20$   
 $2 \times 11 = 22$   
 $2 \times 12 = 24$

$3 \times 1 = 3$   
 $3 \times 2 = 6$   
 $3 \times 3 = 9$   
 $3 \times 4 = 12$   
 $3 \times 5 = 15$   
 $3 \times 6 = 18$   
 $3 \times 7 = 21$   
 $3 \times 8 = 24$   
 $3 \times 9 = 27$   
 $3 \times 10 = 30$   
 $3 \times 11 = 33$   
 $3 \times 12 = 36$

$4 \times 1 = 4$   
 $4 \times 2 = 8$   
 $4 \times 3 = 12$   
 $4 \times 4 = 16$   
 $4 \times 5 = 20$   
 $4 \times 6 = 24$   
 $4 \times 7 = 28$   
 $4 \times 8 = 32$   
 $4 \times 9 = 36$   
 $4 \times 10 = 40$   
 $4 \times 11 = 44$   
 $4 \times 12 = 48$

$5 \times 1 = 5$   
 $5 \times 2 = 10$   
 $5 \times 3 = 15$   
 $5 \times 4 = 20$   
 $5 \times 5 = 25$   
 $5 \times 6 = 30$   
 $5 \times 7 = 35$   
 $5 \times 8 = 40$   
 $5 \times 9 = 45$   
 $5 \times 10 = 50$   
 $5 \times 11 = 55$   
 $5 \times 12 = 60$

$6 \times 1 = 6$   
 $6 \times 2 = 12$   
 $6 \times 3 = 18$   
 $6 \times 4 = 24$   
 $6 \times 5 = 30$   
 $6 \times 6 = 36$   
 $6 \times 7 = 42$   
 $6 \times 8 = 48$   
 $6 \times 9 = 54$   
 $6 \times 10 = 60$   
 $6 \times 11 = 66$   
 $6 \times 12 = 72$

$7 \times 1 = 7$   
 $7 \times 2 = 14$   
 $7 \times 3 = 21$   
 $7 \times 4 = 28$   
 $7 \times 5 = 35$   
 $7 \times 6 = 42$   
 $7 \times 7 = 49$   
 $7 \times 8 = 56$   
 $7 \times 9 = 63$   
 $7 \times 10 = 70$   
 $7 \times 11 = 77$   
 $7 \times 12 = 84$

$8 \times 1 = 8$   
 $8 \times 2 = 16$   
 $8 \times 3 = 24$   
 $8 \times 4 = 32$   
 $8 \times 5 = 40$   
 $8 \times 6 = 48$   
 $8 \times 7 = 56$   
 $8 \times 8 = 64$   
 $8 \times 9 = 72$   
 $8 \times 10 = 80$   
 $8 \times 11 = 88$   
 $8 \times 12 = 96$

$9 \times 1 = 9$   
 $9 \times 2 = 18$   
 $9 \times 3 = 27$   
 $9 \times 4 = 36$   
 $9 \times 5 = 45$   
 $9 \times 6 = 54$   
 $9 \times 7 = 63$   
 $9 \times 8 = 72$   
 $9 \times 9 = 81$   
 $9 \times 10 = 90$   
 $9 \times 11 = 99$   
 $9 \times 12 = 108$

$10 \times 1 = 10$   
 $10 \times 2 = 20$   
 $10 \times 3 = 30$   
 $10 \times 4 = 40$   
 $10 \times 5 = 50$   
 $10 \times 6 = 60$   
 $10 \times 7 = 70$   
 $10 \times 8 = 80$   
 $10 \times 9 = 90$   
 $10 \times 10 = 100$   
 $10 \times 11 = 110$   
 $10 \times 12 = 120$

$11 \times 1 = 11$   
 $11 \times 2 = 22$   
 $11 \times 3 = 33$   
 $11 \times 4 = 44$   
 $11 \times 5 = 55$   
 $11 \times 6 = 66$   
 $11 \times 7 = 77$   
 $11 \times 8 = 88$   
 $11 \times 9 = 99$   
 $11 \times 10 = 110$   
 $11 \times 11 = 121$   
 $11 \times 12 = 132$

$12 \times 1 = 12$   
 $12 \times 2 = 24$   
 $12 \times 3 = 36$   
 $12 \times 4 = 48$   
 $12 \times 5 = 60$   
 $12 \times 6 = 72$   
 $12 \times 7 = 84$   
 $12 \times 8 = 96$   
 $12 \times 9 = 108$   
 $12 \times 10 = 120$   
 $12 \times 11 = 132$   
 $12 \times 12 = 144$





## Unit 1

# 1 Really Big Numbers

## 2 Changing Values

lessons 1&amp;2

## Learn

## MILLIONS



The greatest 6-digit number is 999,999

$999,999 + 1 = 1,000,000$  its called **one million**

Million is the smallest 7-digit number

1,000,000



Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O
		1	0	0	0	0	0	0

Now we can decompose and read the number **12,354,768**



Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O
	1	2	3	5	4	7	6	8

## Ex Complete the following

① 12,354,768 = ..... Million, ..... Thousands, .....

② 325,045,500 = ..... Million, ..... Thousands, .....

③ 140,000,010 = ..... Million, .....

④ 3,400,000 = ..... Million, 400 Thousands

⑤ 700,000,000 = ..... Million

⑥ 75 Million, 842 Thousands, 18 = .....

⑦ 3 Milliard, 864 Thousands, 184 = .....

⑧ 6 Million, 32 Thousands, 472 = .....

⑨ 67 Million, 452 Thousands = .....

**To think** 15 Million, 68 Thousands, 7 = .....



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**Exercise Complete :**

- ① 5,314,250 = ..... Million, ..... Thousands, .....
- ② 520,475,452 = ..... Million, ..... Thousands, .....
- ③ 14, 003,050 = ..... Million, ..... Thousands, .....
- ④ 50,000,420 = ..... Million, .....
- ⑤ 5 Million, 164 Thousands,9 = .....
- ⑥ 25 Million, 14 Thousands,24 = .....
- ⑦ 5 Million, 164 Thousands,9 = .....
- ⑧ 18 Million,145 = .....
- ⑨ 254,618 = 254,000 + .....
- ⑩ 325,000 + 759 = .....

**Learn****MILLIARDS (BILLIONS)**

- The greatest 9-digit number is **999,999,999**
- $999,999,999 + 1 = 1,000,000,000$  its called **one milliard**
- Milliard** is the smallest 10-digit number

**1,000,000,000**

Milliards	Millions			Thousands			Ones		
	H	T	O	H	T	O	H	T	O
1	0	0	0	0	0	0	0	0	0

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- ① 2,354,768,524 = 2 Billiards, 354 Million, 768 Thousands, 524
- ② 1,052,000,861 = 1 Billiards, 52 Million, 861

**To think**

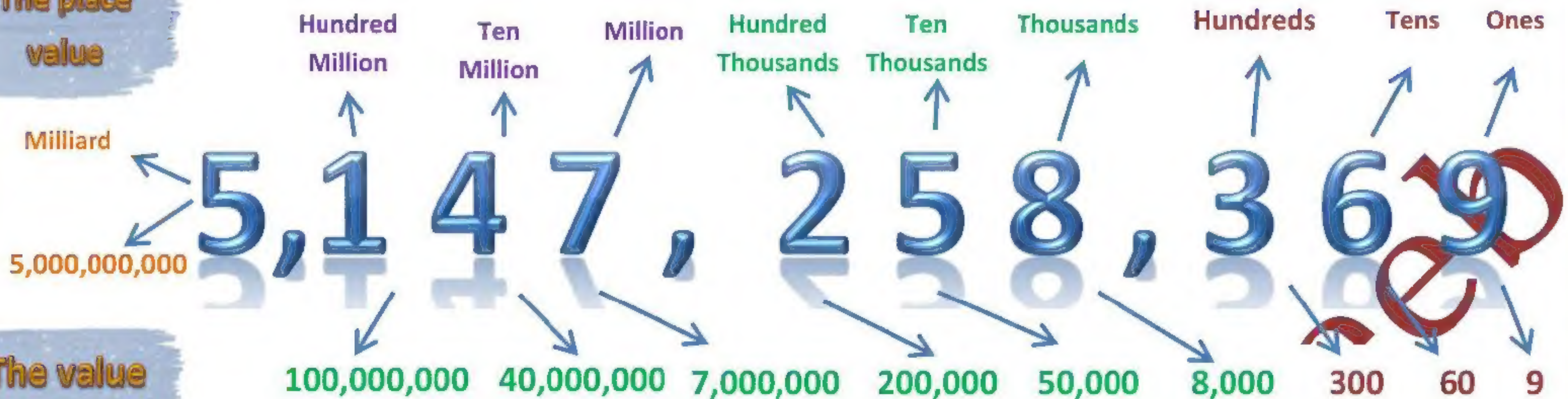
3 Billiards, 65 Thousands, 218 = .....





# The Value & The Place value

The place value



The value

## Exercise

Write the place value and the value of the colored digit :

The number

The place value

The value

7,425,615			
15,427,174			
41,840,453			
85,023,956			
2,315,157,367			

## Exercise

Complete:

① 4 Milliard, 20 Million, 236 Thousands, 412 =

② 5 Milliard, 4 Million, 68 Thousands, 548 =

③ 3 Milliard, 628 Thousands, 752 = .....

④ The place value of the digit 3 in the number 13,452,500 is .....

⑤ The place value of the digit 5 in the number 5,325,141,162 is .....

⑥ The value of the digit 2 in the number 4,258,638 is .....

⑦ The value of the digit 0 in the number 65,012,452 is .....





# Learn

## • Changing Values



Each number in this system = 10 times of the number which in the right of it

Hundred Million	Ten Million	Million	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
2	2	2	2	2	2	2	2	2
200,000,000	20,000,000	2,000,000	200,000	20,000	2,000	200	20	2

10 X

10 X

10 X

10 X

10 X

10 X

10 X

10 X

You can put zeroes instead of these words :

Tens = 0

Hundreds = 00

Thousands = 000

**Notes**

Ten Thousands  
= 0.000

Hundred Thousands  
= 00,000

Million  
= 000.000

Ten Million  
= 0,000,000

Hundred Million  
= 00,000,000

Milliards  
= 000.000.000

Ex ① 30 tens = .....

② 700 thousands = .....

③ 720 hundreds = ..... thousands

④ 50 thousands = 5,000tens

⑤ 2,000 is 10 times .....

⑥ 500,000 is 10 times .....

⑦ 80,000 = ..... Tens

⑧ 3,000 = ..... hundreds

**Exercise** Complete:

① 60 tens = ..... hundreds

② 320 hundreds = ..... tens

③ 90 thousands = .....

④ 40 hundreds = .....

⑤ 1,200 ten thousands = .....million

⑥ 50 million = .....

⑦ 300 ten million = .....

⑧ 500 tens = .....

⑨ ..... = 10 times 40,000

⑩ ..... = 10 times 700





## Home Work

10

Complete :

- 1- ..... = 10 times 720
- 2- the value of the digit 8 in the number 1,285,453 is .....
- 3- 350 hundreds = ..... thousands
- 4- the place value of the digit 7 in the number 4,478,310 is .....
- 5- 5,420,045 = ..... million, .....thousands, .....

Choose the correct answer :

- 1- the smallest 10-digit number is .....  
a) thousand                      b) million                      c) ten million                      d) milliard
- 2- the value of the digit 0 in the number 7,508,487 is .....  
a) 0                      b) 1,000                      c) 10,000                      d) 100,000
- 3- if the place value of 4 is ten thousands then its value is .....  
a) 70                      b) 7,000                      c) 70,000                      d) 7,000,000
- 4- if the value of the digit 8 is 8,000,000 thousands then its place value is .....  
a) thousand                      b) million                      c) ten million                      d) milliard
- 5- 4milliard, 42 million, 60 = .....  
a) 44,260                      b) 404,260                      c) 4,042,060                      d) 4,042,000,060

لغز للأذكيا

شخص متوفي على شاطئ البحر  
وفي يده ورقة مكتوب فيها

N 0 8 4 3 days

فعرف المحقق سبب الوفاة  
فما هو السبب ؟؟



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5

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lessons 3&4

3

Many Ways to Write

4

Composing and Decomposing

Learn

Many Ways to Write Numbers

**Standard form**

We use it most often

2,856,410,820

13,541,088

5,648,504

8,625

476

All of these numbers are written in standard form

**Expanded form**

We write the numbers using its place value

12,675 = 10,000 + 2,000 + 600 + 70 + 5

1,345,215 = 1,000,000 + 300,000 + 40,000 + 5,000 + 200 + 10 + 5

30,450,085 = 30,000,000 + 400,000 + 50,000 + 80 + 5

Zeroes are not write  
in expanded form

3,006,416,150 = 3,000,000,000 + 6,000,000 + 400,000 + 10,000 + 6,000 + 100 + 50

**Word form**

We write the numbers using words

735,652 = seven hundred thirty-five thousands, six hundred fifty-two

3,450,625 = three millions, four hundred fifty thousands, six hundred twenty-five

5,008,045,007 = five milliards, eight millions, forty five thousands, seven

**Short-Word form**

We write the numbers using numbers and words

735,652 = 735 thousands, 652

3,450,620 = 3 million, 450 thousands, 620

5,008,045,007 = 5 milliards, 8 million, 45 thousands, 7





**Examples****Choose the correct answer :**

1- Three billions, six hundred million, nine hundred forty thousands, seventy five =

- a) 360,094,075      b) 3,600,940,057      c) 3,600,940,075      d) 75,940,600,003

2-  $6,000,000 + 200,000 + 50,000 + 400 + 20 + 7 = \dots\dots\dots$ 

- a) 6,250,427      b) 6,250,000,427      c) 427,250,006      d) 625,427

3- 5 billions, 15 million, 235 thousands, 384 =  $\dots\dots\dots$ 

- a) 5,235,015,384      b) 5,015,235,348      c) 515,235,384      d) 5,015,235,384

4- 34 millions, 97 thousands =  $\dots\dots\dots$  ( in expanded form )

- a)  $30,000,000 + 4,000,000 + 900,000 + 7,000$       b)  $30,000,000 + 4,000,000 + 90,000 + 7,000$   
 c)  $30,000,000 + 4,000,000 + 900,000 + 70,000$       d)  $300,000,000 + 4,000,000 + 90,000 + 7,000$

**Exercise****① Choose the correct answer**

1- five billions, eighty-four million, six hundred thousands, seventy three = .....

- a) 5,084,600,073      b) 584,673      c) 5,840,600,073      d) 5,084,600,037

2-  $50,000,000 + 3,000,000 + 500,000 + 20,000 + 6,000 + 700 + 5 = \dots\dots\dots$ 

- a) 5,352,675      b) 53,526,705      c) 53,526,750      d) 503,526,705

3- 43 million, 5 thousands, 317 =  $\dots\dots\dots$ 

- a) 43, 500,317      b) 43,050,317      c) 43,005,317      d) 43,005,371

4- 12 millions, 45 thousands =  $\dots\dots\dots$  ( in expanded form )

- a)  $10,000,000 + 2,000,000 + 400,000 + 5,000$       b)  $100,000,000 + 2,000,000 + 40,000 + 5,000$   
 c)  $10,000,000 + 2,000,000 + 400,000 + 50,000$       d)  $10,000,000 + 2,000,000 + 40,000 + 5,000$

**② Complete :**1- the expanded form for 3,500,085 is  $\dots\dots\dots$ 2- 18 million, 273 thousands, 45 =  $\dots\dots\dots$  ( in standard form )3- the standard form of  $5,000,000 + 30,000 + 4,000 + 700 + 10 + 2$  is  $\dots\dots\dots$ 4- 7,061,495 =  $\dots\dots\dots$  million ,  $\dots\dots\dots$  Thousands ,  $\dots\dots\dots$ 



## Learn

## Composing and Decomposing



**Composing**  its mean put the numbers together

**Decomposing**  its mean put the number in broken parts using expanded form or round brackets ( )

## Examples

Decompose each of the following :

245,683 = **1<sup>st</sup> Way**  $200,000 + 40,000 + 5,000 + 600 + 80 + 3$

**2<sup>nd</sup> Way** =  $(2 \times 100,000) + (4 \times 10,000) + (5 \times 1,000) + (6 \times 100) + (8 \times 10) + (3 \times 1)$

5,042,035 = ..... + ..... + ..... + ..... + .....

or =  $(5 \times \dots) + (4 \times \dots) + (2 \times \dots) + (3 \times \dots) + (5 \times \dots)$

68 million , 20 thousand , 75 = ..... + ..... + ..... + ..... + .....

Compose each of the following :

$80,000,000 + 500,000 + 40,000 + 800 + 7 = \dots\dots\dots$

$(7 \times 1,000,000) + (5 \times 100,000) + (4 \times 10,000) + (3 \times 1,000) + (2 \times 100) + (9 \times 10) + (3 \times 1) = \dots\dots\dots$

## Exercise

**1- Decompose the following numbers using expanded form :**

1- 45,018 = .....

2- 2,500,340 = .....

3- 70,030,205 = .....

4- 5 million , 35 thousand , 47 = .....

5- 6,002,050,410 = .....

**2- Compose the following numbers :**

1-  $5,000,000 + 200,000 + 4,000 + 800 + 70 + 3 = \dots\dots\dots$

2-  $400,000 + 50,000 + 300 + 10 = \dots\dots\dots$

3-  $7,000,000 + 30,000 + 500 + 8 = \dots\dots\dots$

4-  $(7 \times 1,000,000) + (9 \times 100,000) + (5 \times 10,000) + (2 \times 100) + (6 \times 10) + (3 \times 1) = \dots\dots\dots$

5-  $(6 \times 1,000,000,000) + (2 \times 100,000,000) + (5 \times 100,000) + (6 \times 10) + (8 \times 1) = \dots\dots\dots$





## Home Work

10

1- Complete :

- ① 7 million , 305 thousand , 68 = ..... ( in standard form )
- ②  $5,000,000 + 70,000 + 5,000 + 800 + 20 =$  ..... ( in standard form )
- ③  $305,702 = ( 3 \times \dots ) + ( 5 \times \dots ) + ( 7 \times \dots ) + ( 2 \times \dots )$
- ④ 2 milliard , 127 thousand , 469 = ..... ( in standard form )
- ⑤  $14,003,140 =$  ..... million, ..... thousands, .....

2- Choose the correct answer :

- ⑥ seven hundred million , nine hundred twenty-five thousand , fourteen = .....
- a) 7,925,014      b) 70,925,014      c) 700,925,040      d) 700,925,014
- 
- ⑦ the standard form for  $(7 \times 100,000) + (5 \times 10,000) + (4 \times 100)$  is .....
- a) 750,400      b) 705,400      c) 400,750      d) 400,705
- 
- ⑧ which of the following represent 805,402
- a) eight hundred fifty thousand, four hundred two      b) eight hundred five thousand, two hundred four
- c) eight hundred five thousand, four hundred two      d) four hundred two thousand, eight hundred five

3- Decompose the following :

- ⑨  $9,012,125 =$  .....
- ⑩  $3,007,005,017 =$  .....

لغز:

شيء لا يعمل إلا إذا أدخلت أصابعك في عينيه؟





lessons 5&amp;6

5 Comparing Numbers in Multiple forms

6 Ascending and Descending Numbers

Learn

Comparing Numbers in Multiple forms

Compare with < , > or =

7,354,618



7,345,618

1,000,000,000



926,624,830

2,425,135



2,425,136

70,000 + 5,000 + 200 + 10 + 8



70,000 + 5,000 + 400 + 10 + 8

3,000,000 + 900,000 + 20,000 + 400 + 8



3,000,000 + 900,000 + 2,000 + 400 + 8

17 million , 852 thousand , 740



71 million , 852 thousand , 740

3 milliard , 45 thousand , 740



35 million , 261 thousand , 631

Write each number in standard form then compare using < , > or =

3,500,261,631



35 million , 261 thousand , 631

2 milliard , 540 thousand , 740



2,000,540,740

3,500 thousands



3,500,000

300 hundreds



40 thousands

700 tens

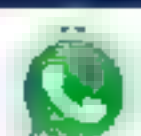


70 hundreds

1,000,000 + 300,000 + 50,000 + 700 + 8



1,357,008



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10

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# Exercise

Compare with  $<$  ,  $>$  or  $=$

1	2,350,400,632		423,348,768
2	5 milliard		5,000 million
3	80,000 tens		800 hundreds
4	$40,000 + 3,000 + 200 + 50 + 8$		430,258
5	3 million , 900 thousands ,247		$3,000,000 + 900,000 + 2,000 + 400 + 8$
6	7 million , 20 thousand , 250		7 million , 200 thousand , 250
7	2 milliard , 63 thousand , 142		25 million , 859 thousand , 458
8	Sixty-two million , seven hundred thousand		62,700,000
9	720 hundreds		72 thousands
10	$5,000,000 + 200,000 + 60,000 + 1,000 + 600 + 30 + 1$		5 million , 261 thousand , 631

## Learn

## Ascending and Descending Numbers

### Ascending and Descending Order



Ex Write the following numbers in ascending and descending order :

3,698,521

5,741,258

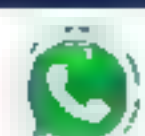
3,698,512

4,846,153

3,689,215

Ascending order : .....

Descending order : .....





**Ex** List following numbers in descending order ( use standard form )

① four milliard , six hundred thousand , four




② 461,014




③ four milliard , six hundred thousand , forty




④ ( 4X1,000,000,000 ) + ( 4X100,000 ) + ( 6X10 )




⑤ 6,400,042




Descending order : ....., ....., ....., .....

List following numbers in ascending order ( use standard form )

⑥ eight hundred million , twenty-five thousand , thirty-one




⑦ 800,000,000 + 20,000 + 5,000 + 300 + 1




⑧ 18 million , 25 thousand , 13




⑨ ( 8X100,000,000 ) + ( 2X100,000 ) + ( 5X1,000 ) + ( 3X10 ) + ( 1X1 )




⑩ 8,002,005,031




Ascending order : ....., ....., ....., .....

### Exercise

1 Arrange the following numbers in ascending order:

① 2,450,618 , 2,405,618 , 2,540,618 , 2,450,186 , 245,618

The order is : ....., ....., ....., .....

② 430,000,449 , 43,000,549 , 403,000,456 , 430,549,000

The order is : ....., ....., ....., .....

2 Use the standard form to arrange the following numbers in ascending order:

① five million , seventy-four thousand , eighty




② 5,000,000 + 700,000 + 4,000 + 8




③ 5 million , 47 thousand , 18




④ ( 5X1,000,000 ) + ( 7X100,000 ) + ( 4X10 )




⑤ 5,074,180




Ascending order : ....., ....., ....., .....





## Home Work

20

1 Compare using  $>$  ,  $<$  or  $=$  :

1- 3,465,280

3,465,208

2- 51,470,014

9,452,759

3- 852,456,951

852,654.951

4- 7,753,002

7,753,020

5- 6 milliard, 8 million, 700

6 milliard, 800 thousand, 700

2 Arrange the following numbers in ascending order:

① 1,741,123 , 1,741,132 , 1,123,741 , 1,714,321

The order is : .....

② 3,200,450,014 , 2,700,450,014 , 5,100,450,014 , 4,600,450,014

The order is : .....

3 Arrange the following numbers in descending order:

① 315,165 , 465,215 , 1,000,741 , 269,321

The order is : .....

② 321,147,896 , 369,789,123 , 47,456,123 , 753,159,251

The order is : .....

4 Use the standard form to arrange the following numbers in ascending order:

① five million , seventy-four thousand , eighty

②  $5,000,000 + 700,000 + 4,000 + 8$ 

③ 5 million , 47 thousand , 18

④  $(5 \times 1,000,000) + (7 \times 100,000) + (4 \times 10)$ 

⑤ 5,074,180

Ascending order : .....

ما هو الشيء الذي تقوم بذبحه  
وتبكي عليه؟





## lessons 7

## 7 Rounding rules

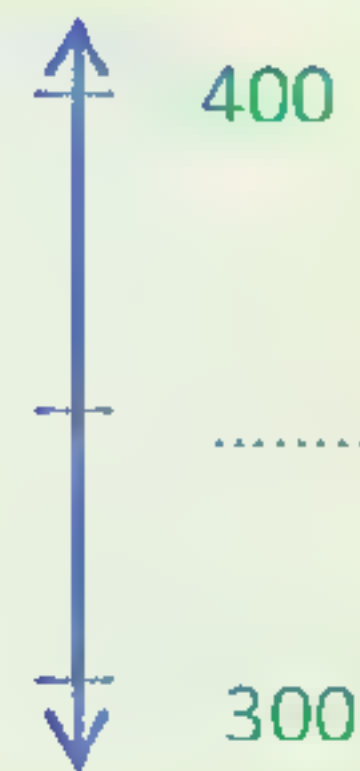
## Learn

## Way 1 Using midpoint strategy



Ex Use midpoint strategy to round each of the following :

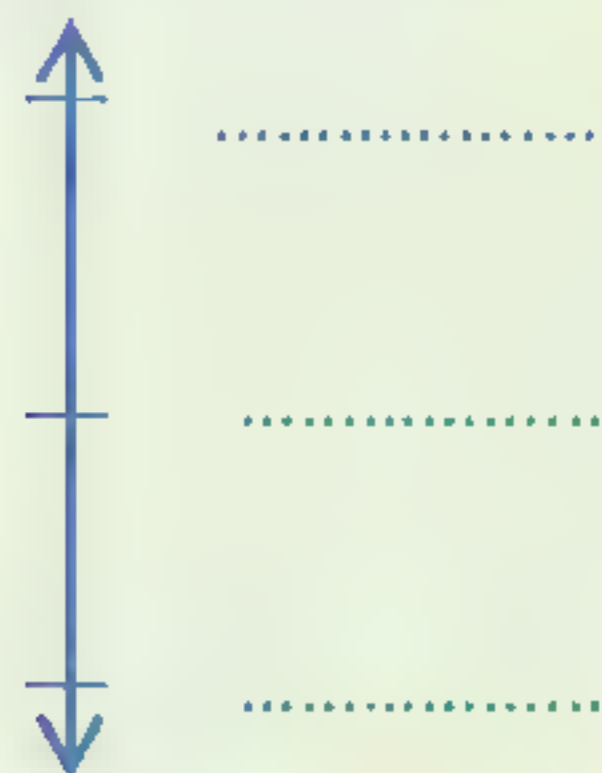
378  $\approx$  ..... to the nearest hundred



15,463  $\approx$  ..... to the nearest thousand



264,755  $\approx$  ..... to the nearest hundred thousand



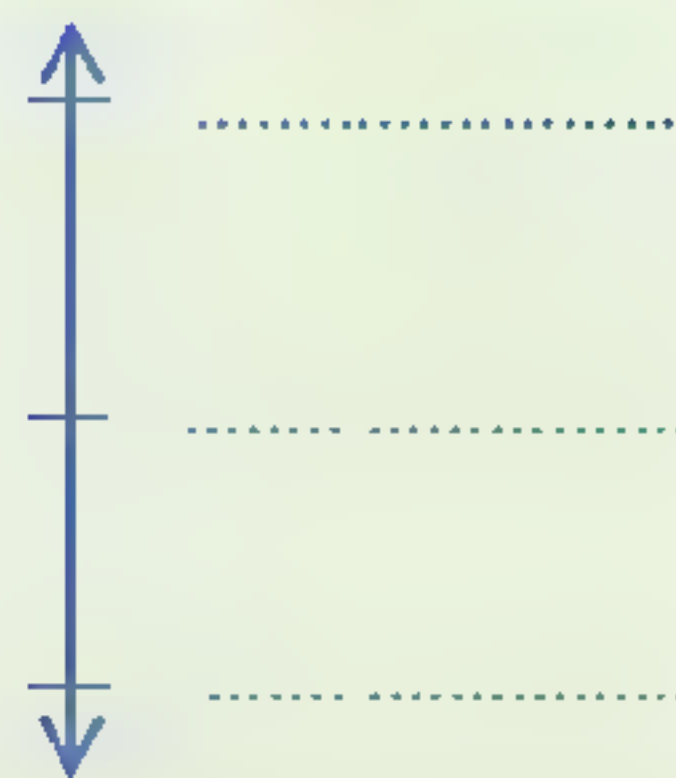
12,345,560  $\approx$  ..... to the nearest million



## Exercise

Use midpoint strategy to round each of the following :

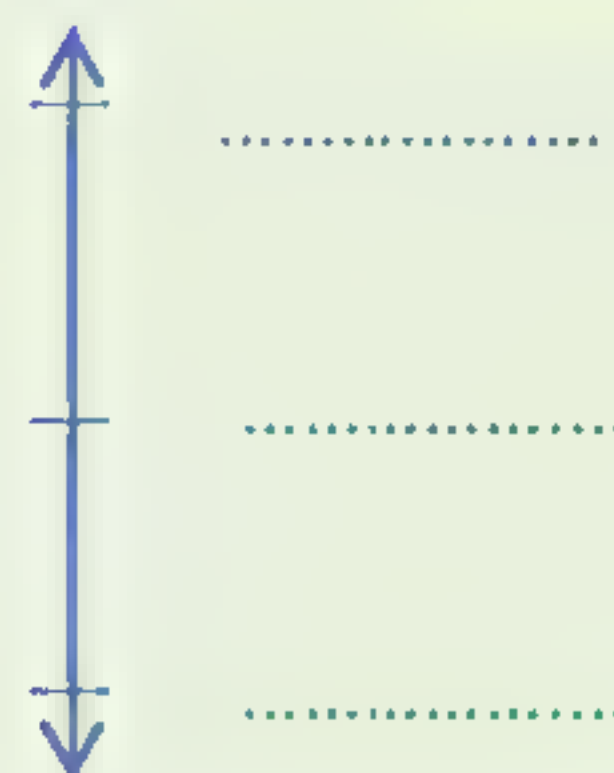
638  $\approx$  ..... to the nearest hundred



17,457  $\approx$  ..... to the nearest ten thousand



24,899  $\approx$  ..... to the nearest thousand



6,423,218  $\approx$  ..... to the nearest million





# Learn

## Way 2

## Using place value strategy

**Ex** Use place value strategy to round each of the following :



- ① 2,181 = ..... ( to the nearest thousand )
- ② 549 = ..... ( to the nearest ten )
- ③ 874 = ..... ( to the nearest hundred )
- ④ 8,090 = ..... ( to the nearest thousand )
- ⑤ 58,936 = ..... ( to the nearest ten thousand )
- ⑥ 2,736,355 = ..... ( to the nearest hundred thousand )
- ⑦ 69,465,123 = ..... ( to the nearest million )
- ⑧ 3,045,875,024 = ..... ( to the nearest milliard )
- To think** 785 = ..... ( to the nearest thousand )

## Exercise

Use place value strategy to complete the following :

The number	Nearest hundred	Nearest thousand	Nearest ten thousand	Nearest million
3,458,365	.....	.....	.....	.....
12,731,849	.....	.....	.....	.....
1,683,745	.....	.....	.....	.....
4,0548,700	.....	.....	.....	.....
16,325,477	.....	.....	.....	.....

• Choose the correct answer :

- ① 2,725 = ..... to the nearest thousand  
 a- 2,700                      b- 2,800                      c- 2,000                      d- 3,000
- ② 387,499 = ..... to the nearest hundred  
 a- 387,400                      b- 387,500                      c- 387,000                      d- 400,000
- ③ 74,350,986 = ..... to the nearest million  
 a- 74,000,000                      b- 75,000,000                      c- 74,400,000                      d- 73,000,000





## Home Work

10

## ① Complete the following :

- Ⓐ rounding the number 23,520 to the nearest thousand  $\approx$  .....
- Ⓑ rounding the number 34,089 to the nearest ten thousand  $\approx$  .....
- Ⓒ 163,500,486  $\approx$  ..... (to the nearest million)
- Ⓓ 2,456,219  $\approx$  ..... (to the nearest ten thousand)
- Ⓔ 4,983,415  $\approx$  ..... (to the nearest hundred thousand)

## ② Choose the correct answer:

- Ⓐ rounding the number 125,436 to the nearest hundred  $\approx$  .....  
 a- 125,440                      b- 125,400                      c- 125,000                      d- 126,000
- Ⓑ rounding the number 6,749,001,551 to the nearest ten milliard  $\approx$  .....  
 a- 6,000,000,000                      b- 7,000,000,000                      c- 8,000,000,000                      d- 6,700,000,000
- Ⓒ 14,349,538  $\approx$  ..... (to the nearest million)  
 a- 14,000,000                      b- 15,000,000                      c- 14,300,000                      d- 14,350,000
- Ⓓ 174,618  $\approx$  ..... (to the nearest thousand)  
 a- 174,600                      b- 174,000                      c- 175,000                      d- 176,000
- Ⓔ 3,450,751  $\approx$  ..... (to the nearest hundred thousand)  
 a- 3,450,000                      b- 3,450,700                      c- 3,400,000                      d- 3,500,000

With my best wishes

أين هي القطة المختلفة؟





Unit 2

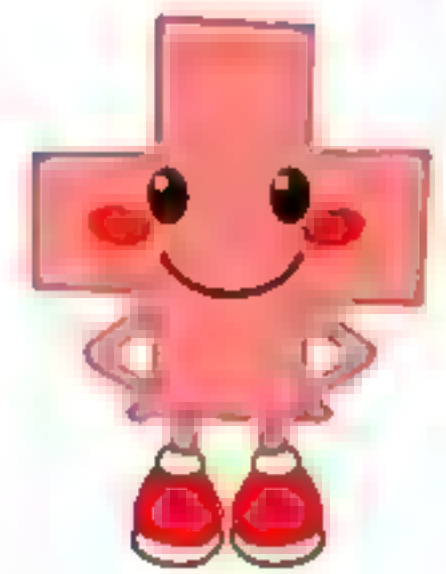
lessons 1&2

1

Properties of addition

2

Addition with regrouping



Learn

1

Properties of addition

Commutative

Add numbers in any order will get the same sum

$$3 + 7 = 7 + 3 = 10$$

Associative

Group the addends in different ways will get the same sum

$4 + 7 + 6$	$4 + 7 + 6$
$(4 + 7) + 6$	$4 + (7 + 6)$
$= 11 + 6$	$= 4 + 13$
$= 17$	$= 17$

Additive identity

Add zero to any number will get the same number

$$8 + 0 = 0 + 8 = 8$$

The additive identity is zero (0)

Ex① Complete the following

Ⓐ  $12 + 64 = \dots + 12$  [..... Property]

Ⓑ  $47 + 0 = \dots$  [..... Property]

Ⓒ  $(1 + 19) + 11 = 1 + (19 + \dots)$  [..... Property]

Ⓓ  $38 + \dots = 38$  [..... Property]

Ex② use the properties of addition to find the sum :

Ⓐ  $25 + 5 + 7$

$= (\dots + \dots) + 7$  [..... Property]

$\dots + \dots = \dots$

Ⓑ  $35 + 99 + 1$

$= 35 + (\dots + \dots)$  [..... Property]

$\dots + \dots = \dots$

Exercise

Choose the correct answer :

Ⓐ  $13 + 0 = 13$  is ..... Property

a- associative    b- commutative    c- additive identity    d- none of the previous

Ⓑ  $8 + (12 + 9) = (8 + 12) + 9$  is ..... Property

a- associative    b- commutative    c- additive identity    d- none of the previous





## Learn

## ② Addition with regrouping



Ex① find the sum of the following :

**A**

$$\begin{array}{r} 357 \\ + \\ 248 \\ \hline \end{array}$$

**B**

$$\begin{array}{r} 9,999 \\ + \\ 6,087 \\ \hline \end{array}$$

**C**

$$\begin{array}{r} 328,498 \\ + \\ 846,185 \\ \hline \end{array}$$

**D**

$$\begin{array}{r} 3,725,356 \\ + \\ 4,174,963 \\ \hline \end{array}$$

**E**

$$\begin{array}{r} 152,186 \\ + \\ 248,752 \\ \hline \end{array}$$

**F**

$$\begin{array}{r} 129,999 \\ + \\ 3,526,087 \\ \hline \end{array}$$

**G**

$$\begin{array}{r} 3,012,240,600 \\ + \\ \text{Ten million} \\ \hline \end{array}$$

**H**

$$\begin{array}{r} 3,725,356 \\ + \\ \text{Hundred thousand} \\ \hline \end{array}$$

Ex② complete the following :

①  $12,048 + 45,388 = \dots\dots\dots$  ②  $30,000 + 184,586 = \dots\dots\dots$

③  $52,002,417 + 10,000,000 = \dots\dots\dots$  ④  $24,458 + 72,359 = \dots\dots\dots$

⑤  $2,500,467 + \text{one thousand} = \dots\dots\dots$  ⑥  $13,240,100 + \text{milliard} = \dots\dots\dots$

Ex③ Round each of the following then find the exact sum:

**A**

$$\begin{array}{r} 6,485,692 \\ + \\ 2,752,235 \\ \hline \end{array}$$

to nearest million  $\longrightarrow \dots\dots\dots$

to nearest million  $\longrightarrow \dots\dots\dots$

**B**

$$\begin{array}{r} 524,638 \\ + \\ ,287,452 \\ \hline \end{array}$$

to nearest thousand  $\longrightarrow \dots\dots\dots$

to nearest thousand  $\longrightarrow \dots\dots\dots$

## Exercise

① Find the sum :

**A**

$$\begin{array}{r} 260 \\ + \\ 140 \\ \hline \end{array}$$

**B**

$$\begin{array}{r} 1,570 \\ + \\ 6,547 \\ \hline \end{array}$$

**C**

$$\begin{array}{r} 328,474 \\ + \\ 234,185 \\ \hline \end{array}$$

**D**

$$\begin{array}{r} 1,725,708 \\ + \\ 4,500,963 \\ \hline \end{array}$$

**E**

$$\begin{array}{r} 145,166 \\ + \\ 350,452 \\ \hline \end{array}$$

**F**

$$\begin{array}{r} 999,999 \\ + \\ 1 \\ \hline \end{array}$$

**G**

$$\begin{array}{r} 35,428,100 \\ + \\ \text{one million} \\ \hline \end{array}$$

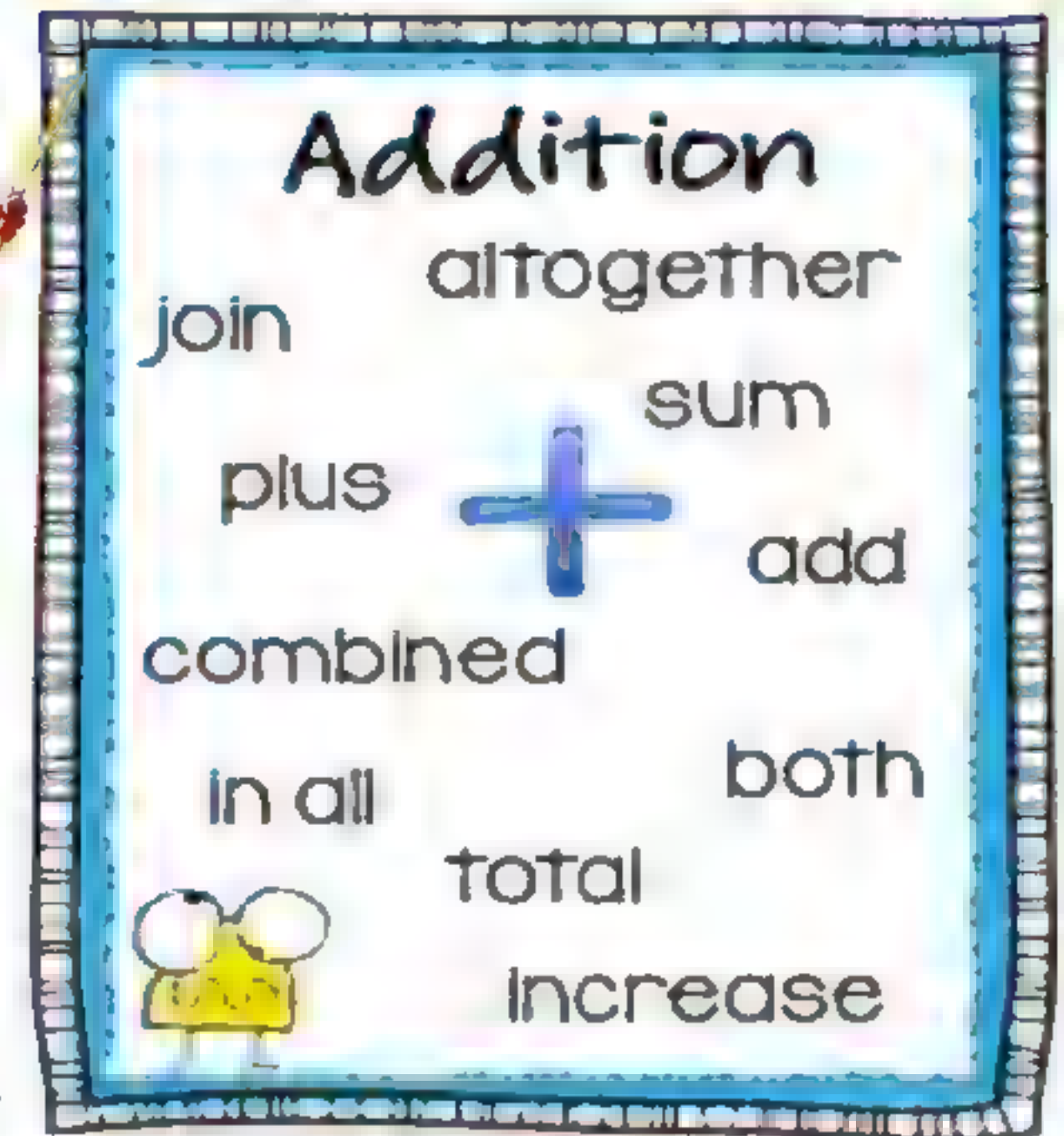
**H**

$$\begin{array}{r} 7,425 \\ + \\ \text{two thousand} \\ \hline \end{array}$$





## Story problems



A bridge of ants consists of 142 ants , and another bridge  
Consists of 165 ants . How many ants are there in the two  
Bridges together ?

Sara collected 5,452 cans to recycle , Hani collected 2,856  
Cans . how many cans where collected ?



In a month 18,463 tourists visited Karnak temple.  
In the next month 23,518 tourists visited it . How many  
Tourists visited the temple in the two months ?



## Exercise

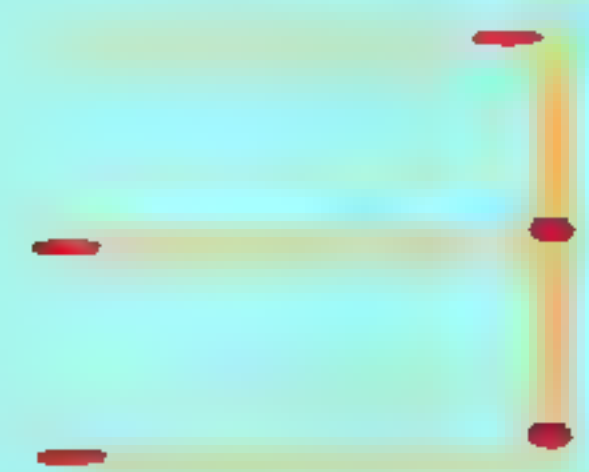
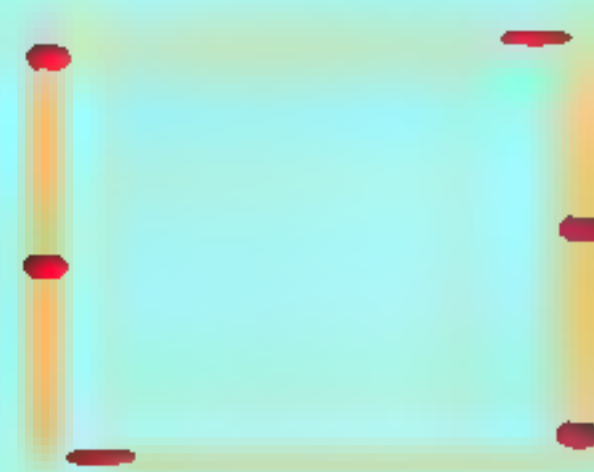
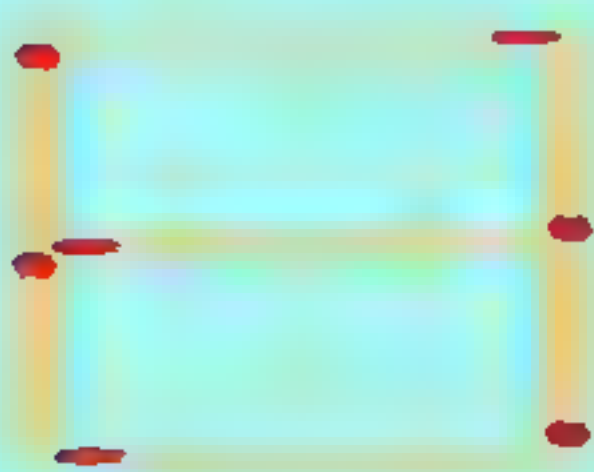
Amira saved L.E 286 in a month , and her brother saved L.E 362  
In the same month. How much money dose Amira and her  
brother saved ?



ALMOSTAFA

01119062132

لغز معقد جدا  
ما هو أكبر عدد يمكن أن تحصل عليه إذا قمت بتحريك  
عودي ثقاب فقط ؟؟؟



الغاز العبارة للأذكاء فقط



01119062132



## Home Work

10

① Find the sum of the following :

**A**

$$\begin{array}{r} 73,458 \\ + \\ 12,257 \\ \hline \end{array}$$

**B**

$$\begin{array}{r} 1,653 \\ + \\ 2,475 \\ \hline \end{array}$$

**C**

$$\begin{array}{r} 3,108,856 \\ + \\ 865,421 \\ \hline \end{array}$$

**D**

$$\begin{array}{r} 17,456 \\ + \\ 3,544 \\ \hline \end{array}$$

**E**

$$\begin{array}{r} 6,250,490 \\ + \\ 1,218,638 \\ \hline \end{array}$$

**F**

$$\begin{array}{r} 7,859 \\ + \\ 14,523 \\ \hline \end{array}$$

**G**

$$\begin{array}{r} 9,989,999 \\ + \\ 21,456 \\ \hline \end{array}$$

**H**

$$\begin{array}{r} 22,485,218 \\ + \\ 3,514,782 \\ \hline \end{array}$$

② find the sum

**A**  $26,415 + 42,752 = \dots\dots\dots$

**B**  $2,752,017 + \text{hundred thousand} = \dots\dots\dots$

**C**  $245,385 + 416,887 = \dots\dots\dots$

**D**  $143,019 + \text{one thousand} = \dots\dots\dots$

③ Round to the nearest hundred thousand then find the exact sum:

**A**

$$\begin{array}{r} 452,126 \longrightarrow \dots\dots\dots \\ + \\ 140,623 \longrightarrow \dots\dots\dots \\ \hline \end{array}$$

**B**

$$\begin{array}{r} 125,014 \longrightarrow \dots\dots\dots \\ + \\ 162,856 \longrightarrow \dots\dots\dots \\ \hline \end{array}$$

④ Heba bought a laptop for 13,458 pounds , and a TV set for 8,450 pounds

What the total money did she pay ?

⑤ Ahmed and Abeer are travelling from Aswan to Alexandria , they travel 514 km in the first day , and 597 km in the second day . How many kilometers they are travel in all?





lessons 3

# Subtraction with regrouping

Ex① find the results of the following :

**A**

$$\begin{array}{r} 357 \\ - 248 \\ \hline \end{array}$$

**B**

$$\begin{array}{r} 9,909 \\ - 6,087 \\ \hline \end{array}$$

**C**

$$\begin{array}{r} 328,215 \\ - 105,185 \\ \hline \end{array}$$

**D**

$$\begin{array}{r} 3,000,000 \\ - 1,174,963 \\ \hline \end{array}$$

**E**

$$\begin{array}{r} 165,410 \\ - 18,458 \\ \hline \end{array}$$

**F**

$$\begin{array}{r} 22,342,000 \\ - 1,180,000 \\ \hline \end{array}$$

**G**

$$\begin{array}{r} 84,000,000 \\ - \text{Two million} \\ \hline \end{array}$$

**H**

$$\begin{array}{r} 4,520,463 \\ - \text{Ten thousand} \\ \hline \end{array}$$

Ex② Find the results:

**A**  $820,640 - 362,518 = \dots\dots\dots$

**B**  $820,640 - 362,518 = \dots\dots\dots$

**C**  $700,000 - 362,518 = \dots\dots\dots$

**D**  $100,645 - 82,468 = \dots\dots\dots$

Ex③ Round each of the following then find the exact results:

**A**

$$\begin{array}{r} 735 \\ - 164 \\ \hline \end{array}$$

to nearest hundred  $\rightarrow \dots\dots\dots$

to nearest hundred  $\rightarrow \dots\dots\dots$

**B**

$$\begin{array}{r} 36,458 \\ - 27,452 \\ \hline \end{array}$$

to nearest thousand  $\rightarrow \dots\dots\dots$

to nearest thousand  $\rightarrow \dots\dots\dots$

## Exercise

① Find the result :

**A**

$$\begin{array}{r} 357 \\ - 248 \\ \hline \end{array}$$

**B**

$$\begin{array}{r} 9,909 \\ - 6,087 \\ \hline \end{array}$$

**C**

$$\begin{array}{r} 328,215 \\ - 105,185 \\ \hline \end{array}$$

**D**

$$\begin{array}{r} 3,000,000 \\ - 1,174,963 \\ \hline \end{array}$$

**E**

$$\begin{array}{r} 165,410 \\ - 18,458 \\ \hline \end{array}$$

**F**

$$\begin{array}{r} 22,342,000 \\ - 1,180,000 \\ \hline \end{array}$$

**G**

$$\begin{array}{r} 84,000,000 \\ - \text{Two million} \\ \hline \end{array}$$

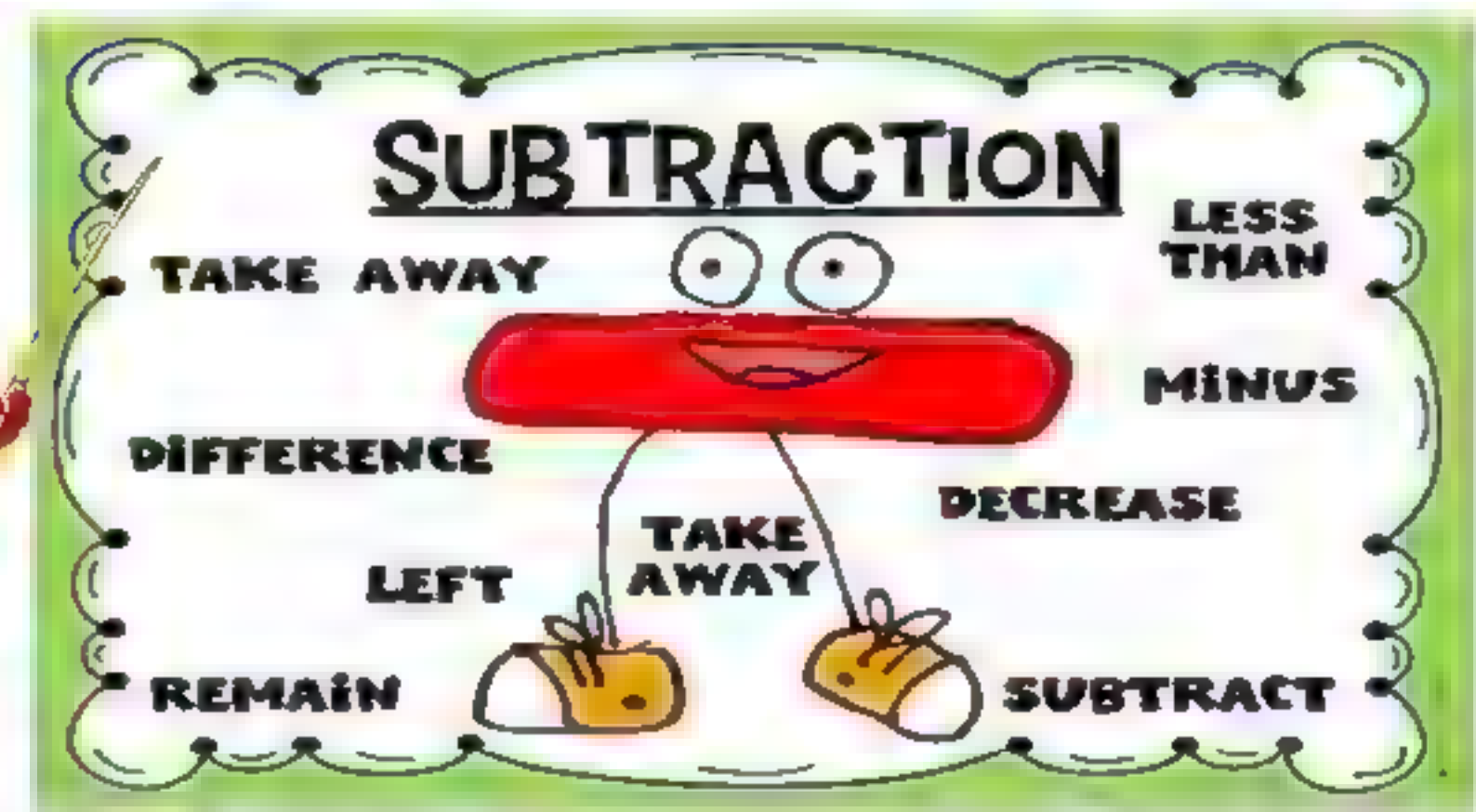
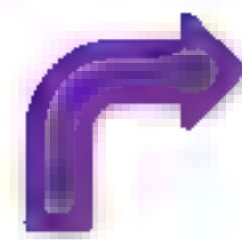
**H**

$$\begin{array}{r} 4,520,463 \\ - \text{Ten thousand} \\ \hline \end{array}$$



## Story problems

WE USE SUBTRACT WITH THIS WORDS



Ⓐ Samir and Mohamed participated in a project.

Samir paid 342,650 pounds. If the cost of the project is 668,500 pounds, how much is Mohamed paying?



Ⓑ If the population of Matrouh Governorate is 517,901 people, and the population of South Sinai Governorate is 112,211, then what is the difference between the population of Matrouh Governorate and the population of South Sinai Governorate?

Ⓒ A trap jaw ant wanted to cross a river that was 3,548 cm across. The ant had already swum 1,672 cm. How much farther does the ant have to go?



Ⓓ A fire ant colony has 255,000 ants. A Gigantism destructor ant colony has 6,200 ants. What is the difference between the size of the two colonies?



ما هو الشيء الذي  
يأكل ولا يشبع؟





## Home Work

16

Choose the correct answer.① Subtract:  $613 - 247 = \dots\dots\dots$ 

- A. 567                      B. 434                      C. 36                      D. 807

② Find the difference:  $457,206 - 124,680 = \dots\dots\dots$ 

- A. 332,486              B. 333,486              C. 332,526              D. 333,526

③ Which one has the answer 23,837 ?

- A.  $37,521 - 12,684$       C.  $36,521 - 13,684$       B.  $36,521 - 12,684$       D.  $38,521 - 13,684$

④ A local bakery sold 1,232 Zalabya in one day. If they sold 876 Zalabya in the morning, how many were sold during the rest of the day?

- A. 356                      B. 520                      C. 1,588                      D. 2,108

⑤ If Ahmed had 100 pounds, and the sum of what he and his friend had was 350 pounds. How much money did his friend have?

- A. 250                      B. 150                      C. 100                      D. 50

⑥ Salma solves this problem 
$$\begin{array}{r} 2,524 \\ - 1,352 \\ \hline 2 \end{array}$$
 What is her next step?

- A. Add 2 and 5 in the tens place.  
B. Subtract 5 from 2 in the tens place.  
C. Regroup the tens place and subtract 5 from 12.  
D. Regroup the tens place and subtract 5 from 11.

⑦ Which choice shows how you would correctly use rounding to estimate a reasonable answer to the problem  $537 - 259$ ?

- A.  $520 - 250 = 270$       C.  $540 - 260 = 280$       B.  $530 - 240 = 290$       D.  $540 - 250 = 290$

⑧ A shop sold goods for 54,243 pounds and 34,786 pounds in the next day. What is the difference between the sales in the two days?

- A.  $54,243 - 34,786 = 20,543$  pounds.      C.  $54,243 + 34,786 = 88,929$  pounds.  
B.  $54,243 - 34,786 = 19,457$  pounds.      D.  $54,243 + 34,786 = 89,029$  pounds

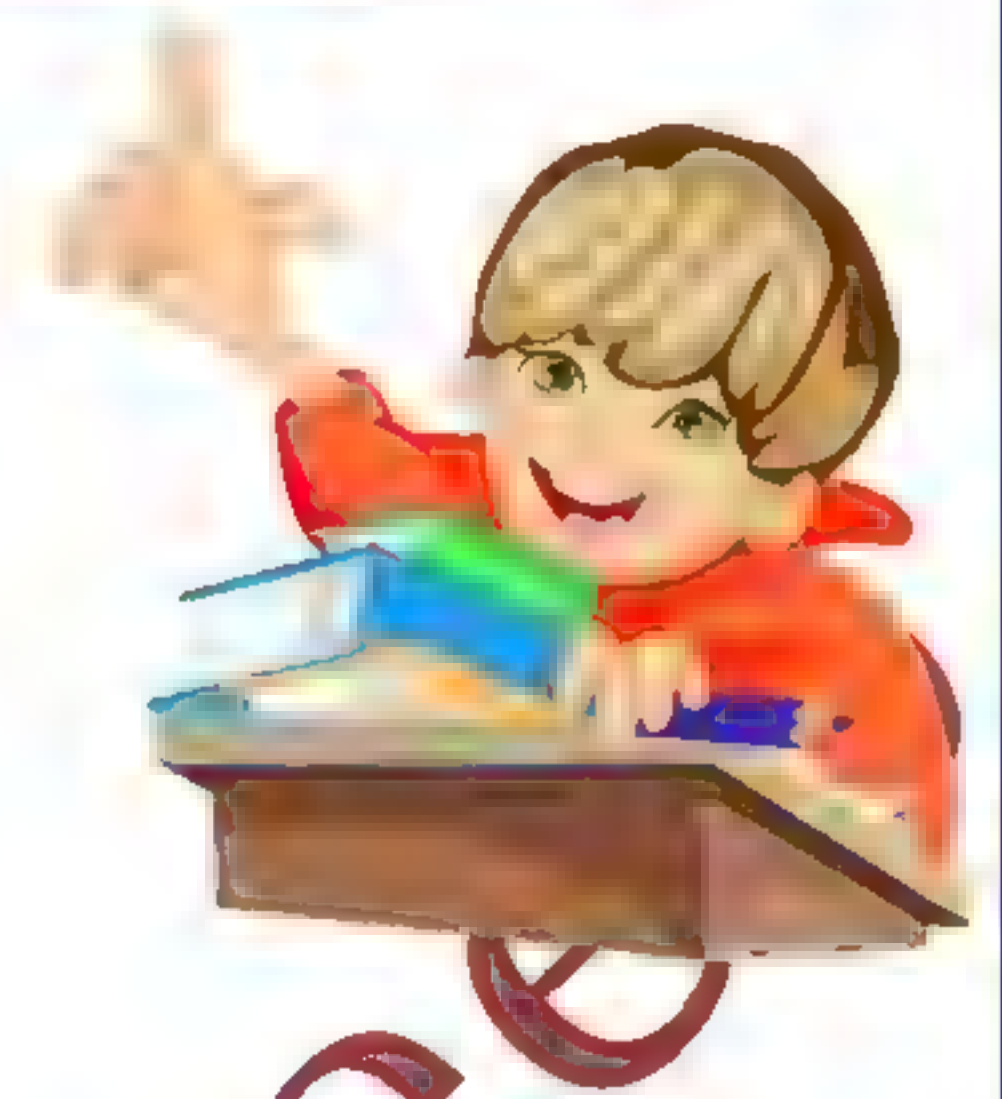
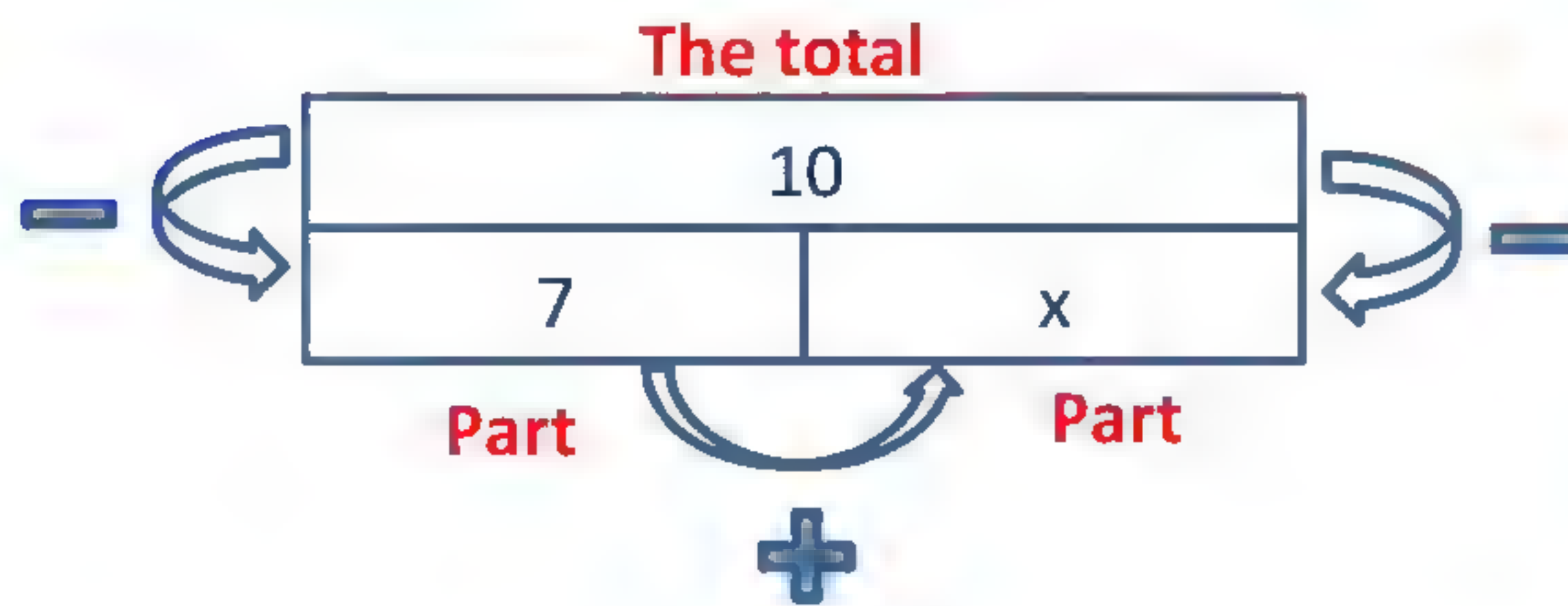




lessons 4

# Bar models , Variables and story problems

## Bar model



Ex Find the value of the variables :

1	43
23	n

n = .....

2	100
m	55

m = .....

3	h
14	35

h = .....

4	216
135	x

x = .....

5	324
y	218

y = .....

6	f
210	308

f = .....

7	1,758
817	k

k = .....

8	264
a	458

a = .....

9	b
2,650	1,350

b = .....

## Exercise

1	58
23	n

n = .....

2	300
m	200

m = .....

3	h
500	200

h = .....

4	283
125	x

x = .....

5	724
y	518

y = .....

6	f
2,000	1,000

f = .....

7	2,148
117	k

k = .....

8	6,352
a	2,352

a = .....

9	b
4,255	745

b = .....





## Variables and solving equation

Ex① : Use bar model to solving the following equations :

①  $a + 9 = 13$   
 $a = \dots\dots\dots$


②  $b - 15 = 21$   
 $b = \dots\dots\dots$


③  $38 + c = 50$   
 $c = \dots\dots\dots$


④  $47 - e = 28$   
 $e = \dots\dots\dots$


⑤  $125 + 150 = f$   
 $f = \dots\dots\dots$


⑥  $310 - 200 = h$   
 $h = \dots\dots\dots$


Ex② : Complete :

① In the equation  $125 + a = 300$ , then  $a = \dots\dots\dots$

② In the equation  $m + 710 = 930$ , then  $m = \dots\dots\dots$

③ In the equation  $n - 1,590 = 3,410$ , then  $n = \dots\dots\dots$

④ If  $C - 2,348 = 5,053$ , then  $C = \dots\dots\dots$

Work area

## Exercise

Use bar model to solving the following equations :

①  $a + 9 = 13$   
 $a = \dots\dots\dots$


②  $b - 15 = 21$   
 $b = \dots\dots\dots$


③  $38 + c = 50$   
 $c = \dots\dots\dots$


④  $47 - e = 28$   
 $e = \dots\dots\dots$


⑤ If  $C - 48 = 52$ , then  $C = \dots\dots\dots$

⑥ If  $500 - b = 300$ , then  $b = \dots\dots\dots$

⑦ If  $128 + x = 350$ , then  $x = \dots\dots\dots$

⑧ If  $y + 345 = 490$ , then  $y = \dots\dots\dots$





## Story problems

① Mr. Mostafa has written 157 pages of a book. He wants the book to have about 550 pages. How many more pages does he need to write?

Equation:.....


Solution:.....

② The number of boys and girls in a school is 2,340 if the number of boys in this school is 1,234 What is the number of girls in this school?

Equation:.....


Solution:.....

③ There are 5,328 ants in the colony. In the colony, 2,164 ants are females and the rest are males. How many male ants are in the colony?

Equation:.....


Solution:.....

④ There are 12,000 species of ants. 2,500 species live in Africa and the rest live in other parts of the world. How many species do not live in Africa?

Equation:.....


Solution:.....

## Exercise

In colony A there are 1,200 ants. Some ants are out foraging for food and supplies, and 700 ants are taking out the colony's trash. How many ants are foraging for food and supplies?

Equation:.....


Solution:.....





## Home Work

15

## ① Choose the correct answer.

① If  $x - 8 = 24$ , then  $x =$  .....

A. 20

B. 8

C. 32

D. 10

② What is the value of  $x$ ?  $25 + x = 37$

A. 7

B. 12

C. 62

D. 72

③ If  $32,782 + k = 41,262$ , then  $k =$  .....

A. 8,562

B. 8,480

C. 74,044

D. 73,916

④ If  $35,741 - y = 7,425$ , then  $y =$  .....

A. 28,316

B. 43,166

C. 40,213

D. 15,730

⑤ There are 30,000 ants in the colony, In the colony 17,300 are females and the rest are males then the number of male ants = .....

A. 47,300

B. 12,452

C. 50,760

D. 12,700

## ② Find the value of the variables:

①

700	
200	n

n = .....

②

320	
m	150

m = .....

③

h	
114	325

h = .....

④

3,074	
1,235	x

x = .....

⑤

4,000	
y	2,100

y = .....

⑥

f	
2,000	000,3

f = .....

## ③ Use bar model to solving the following equations:

①

$a + 40 = 90$

a = .....


②

$b - 238 = 121$

b = .....


③

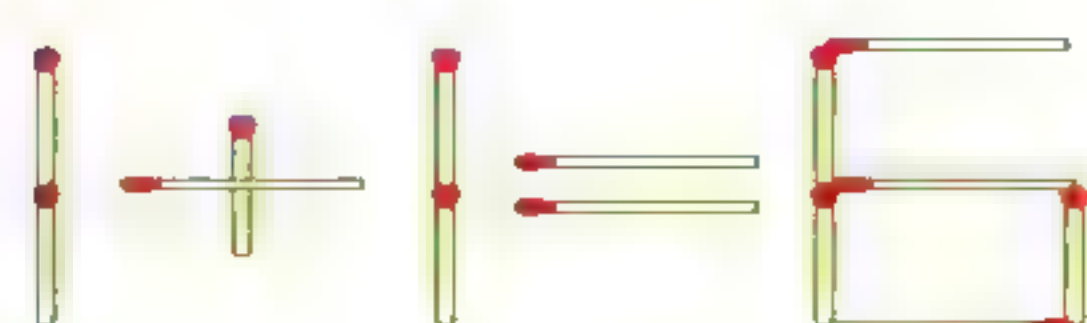
$1,425 + a = 3500$

a = .....


④

$680 - b = 240$

b = .....



## lessons 5

## Solving multistep story problem with addition and subtraction

① Ali is reading a book. He reads 96 pages in the first week and 129 pages in the second week. The book has 290 pages. How many pages are left to read?

---

---

---

② A library sold 25,325 books in the first week, 19,712 books in the second week and 28,119 in the third week. If the library had 473,590 book. How many books are left?

---

---

---

③ Sara, Bassem and Mina are collecting stamps. Sara collected 743 stamps, Bassem collected 198 stamps and Mina collected 357 stamps. How many more stamps did Sara collect than Bassem and Mina have combined?

---

---

---

### Exercise

The ant colony website hopes that a new colony A with up to 173,500 will form. If a colony of 27,385 ants and a colony of 52,890 ants join the new colony, how many more ants can join?

---

---

---





## Home Work

15

The Great Pyramid had 59,000 visitors in January, 27,525 visitors in February, and 32,975 visitors in March. They expect to have 150,000 visitors by the end of April. How many visitors need to show up in April to reach this count?

---



---



---

New Valley has a population of 256,088. If Matrouh has a population of 429,999 and South Sinai has a population of 108,951, how many more people do Matrouh and South Sinai have combined than New Valley?

---



---



---

A factory sold 6,580 toys in the first month, 7,214 toys in the second month, and 5,975 toys in the third month. The expect number of sold toys is 25,000 toys by the end of the fourth month. How many toys are needed to be sold in the fourth month to reach this count?

---



---



---

With my best wishes

ALMOSTAFA

01119062132

لغز للأذكىاء فقط....  
ام مريم عندها 4 بنات  
خوخة ومشمشة وتفاحة  
ما اسم البنت الرابعة؟!





## Unit 3

## lessons 1

## Measuring lengths



Metric system

$$1 \text{ km} = 1000 \text{ m}$$

$$1 \text{ meter} = 10 \text{ dm}$$

$$1 \text{ meter} = 100 \text{ cm}$$

$$1 \text{ cm} = 10 \text{ mm}$$

$$3 \text{ km}, 46 \text{ cm} = 3,046 \text{ m}$$

$$12 \text{ m}, 8 \text{ cm} = 1,208 \text{ cm}$$

Ex① : complete the following :

$$\textcircled{1} \ 8 \text{ km} = \dots\dots\dots \text{ m}$$

$$\textcircled{2} \ 5 \text{ m} = \dots\dots\dots \text{ cm}$$

$$\textcircled{3} \ 4 \text{ cm} = \dots\dots\dots \text{ mm}$$

$$\textcircled{4} \ 13 \text{ km} = \dots\dots\dots \text{ m}$$

$$\textcircled{5} \ 14 \text{ m} = \dots\dots\dots \text{ cm}$$

$$\textcircled{6} \ 23 \text{ cm} = \dots\dots\dots \text{ mm}$$

$$\textcircled{7} \ 27 \text{ km} = \dots\dots\dots \text{ m}$$

$$\textcircled{8} \ 17 \text{ m} = \dots\dots\dots \text{ dm}$$

$$\textcircled{9} \ 25 \text{ cm} = \dots\dots\dots \text{ mm}$$

$$\textcircled{10} \ 8,000 \text{ m} = \dots\dots\dots \text{ km}$$

$$\textcircled{11} \ 4,000 \text{ cm} = \dots\dots\dots \text{ m}$$

$$\textcircled{12} \ 100 \text{ mm} = \dots\dots\dots \text{ cm}$$

$$\textcircled{13} \ 30,000 \text{ m} = \dots\dots\dots \text{ km}$$

$$\textcircled{14} \ 30 \text{ dm} = \dots\dots\dots \text{ cm}$$

$$\textcircled{15} \ 9,000 \text{ mm} = \dots\dots\dots \text{ cm}$$

## Exercise

$$\textcircled{1} \ 3 \text{ km} = \dots\dots\dots \text{ m}$$

$$\textcircled{2} \ 2 \text{ m} = \dots\dots\dots \text{ cm}$$

$$\textcircled{3} \ 9 \text{ cm} = \dots\dots\dots \text{ mm}$$

$$\textcircled{4} \ 43 \text{ km} = \dots\dots\dots \text{ m}$$

$$\textcircled{5} \ 64 \text{ m} = \dots\dots\dots \text{ cm}$$

$$\textcircled{6} \ 18 \text{ cm} = \dots\dots\dots \text{ mm}$$

$$\textcircled{7} \ 9,000 \text{ m} = \dots\dots\dots \text{ km}$$

$$\textcircled{8} \ 2,000 \text{ cm} = \dots\dots\dots \text{ m}$$

$$\textcircled{9} \ 300 \text{ mm} = \dots\dots\dots \text{ cm}$$





**Ex② : complete the following :**

① 4,680 m = .....km , ..... m

③ 7,048 m = .....km , ..... m

⑤ 423 cm = .....m , ..... cm

⑦ 2,700cm = .....m , ..... cm

② 518 cm = .....m , ..... cm

④ 607 cm = .....m , ..... cm

⑥ 315 mm = .....cm , ..... mm

⑧ 2,018 cm = .....m , ..... cm

**Ex③ : complete the following :**

① 3 km , 356 m = ..... m

③ 12 km , 12 cm = ..... m

⑤ 3 km , 300 m = ..... m

⑦ 14 km + 14 m = ..... m

② 4 m , 36 cm = ..... cm

④ 28 m , 6 cm = ..... cm

⑥ 8 m + 8 cm = ..... m

⑧ 7 cm + 7 mm = ..... mm

## Exercise

① 2,758 m = .....km , ..... m

③ 3,052 m = .....km , ..... m

⑤ 5 km , 200 m = ..... m

⑦ 34 km + 18 m = ..... m

⑨ 2,458 m = .....km , ..... m

② 310 cm = .....m , ..... cm

④ 404 cm = .....m , ..... cm

⑥ 4 m + 2 cm = ..... m

⑧ 5 cm + 5 mm = ..... mm

⑩ 951 cm = .....m , ..... cm

**لغز =**

شهر هجري إذا حذفت وسطه  
أصبح اسم فاكهة فما هو؟





## Home Work

15

① Complete the following :

① 1km = ..... m

② 4 km = ..... m

③ 100 mm = .....cm

④ 5m= .....cm

⑤ 9,000 mm = .....m

⑥ 180 dm = .....cm

⑦ 6 m = ..... mm

⑧ 150 cm = .....mm

⑨ 8 km , 14 m = ..... m

⑩ 8 m , 45 cm = ..... cm

② Choose the correct answer :

① 18 m, 14 cm = .....cm

A. 32

B. 1,814

C. 18,140

D. 18,014

② 505 cm = ..... m , ..... cm

A. 5 , 5

B. 5 , 50

C. 5 ,500

D. 50 , 500

③ 4m,16 dm = ..... dm

A. 416

B. 4,160

C. 56

D. 4,016

④ 3 km = ..... m

A. 3

B. 30

C. 3,000

D. 13,000

⑤ 5,000 mm = ..... m

A. 5

B. 50

C. 500

D. 50,000





## lessons 2

## Measuring Mass ( Weight )



Mass units :

1 kilogram ( kg )

 $\times 1,000$ 

1,000 gram ( g )

 $\div 1,000$ 

$1 \text{ kg} = 1,000 \text{ g}$

$5 \text{ kg} = 5,000 \text{ g}$

$2 \text{ kg}, 75 \text{ g} = 2,075 \text{ g}$

Ex① : complete the following :

①  $8 \text{ kg} = \dots\dots\dots \text{ g}$

②  $5,000 \text{ g} = \dots\dots\dots \text{ kg}$

③  $4 \text{ kg}, 500 \text{ g} = \dots\dots\dots \text{ g}$

④  $13 \text{ kg} = \dots\dots\dots \text{ g}$

⑤  $14,000 \text{ g} = \dots\dots\dots \text{ kg}$

⑥  $7 \text{ kg}, 248 \text{ g} = \dots\dots\dots \text{ g}$

⑦  $27 \text{ kg} = \dots\dots\dots \text{ g}$

⑧  $32,000 \text{ g} = \dots\dots\dots \text{ kg}$

⑨  $12 \text{ kg} + 12 \text{ g} = \dots\dots\dots \text{ g}$

⑩  $7 \text{ kg} = \dots\dots\dots \text{ g}$

⑪  $4,000 \text{ g} = \dots\dots\dots \text{ kg}$

⑫  $8,000 \text{ g} = \dots\dots \text{ kg}, \dots\dots \text{ g}$

⑬  $32 \text{ kg} = \dots\dots\dots \text{ g}$

⑭  $30,000 \text{ g} = \dots\dots\dots \text{ kg}$

⑮  $3,038 \text{ g} = \dots\dots \text{ kg}, \dots\dots \text{ g}$

## Exercise ①

kg =  $\dots\dots\dots$  g ④

②  $1,000 \text{ g} = \dots\dots\dots \text{ kg}$

③  $2 \text{ kg}, 500 \text{ g} = \dots\dots\dots \text{ g}$

④  $45 \text{ kg} = \dots\dots\dots \text{ g}$

⑤  $85,000 \text{ g} = \dots\dots\dots \text{ kg}$

⑥  $1 \text{ kg}, 855 \text{ g} = \dots\dots\dots \text{ g}$

⑦  $18 \text{ kg} = \dots\dots\dots \text{ g}$

⑧  $13,000 \text{ g} = \dots\dots\dots \text{ kg}$

⑨  $7 \text{ kg} + 45 \text{ g} = \dots\dots\dots \text{ g}$

## Exercise ①

Choose the correct answer:

①  $8 \text{ kg}, 14 \text{ g} = \dots\dots \text{ g}$  [ A - 814      B - 148      C - 8,014      D - 1,408 ]

②  $18 \text{ kg}, 7 \text{ g} = \dots\dots \text{ g}$  [ A - 187      B - 718      C - 1,807      D - 18,007 ]

③  $40,000 \text{ g} = \dots\dots \text{ kg}$  [ A - 4      B - 40      C - 400      D - 4,000 ]

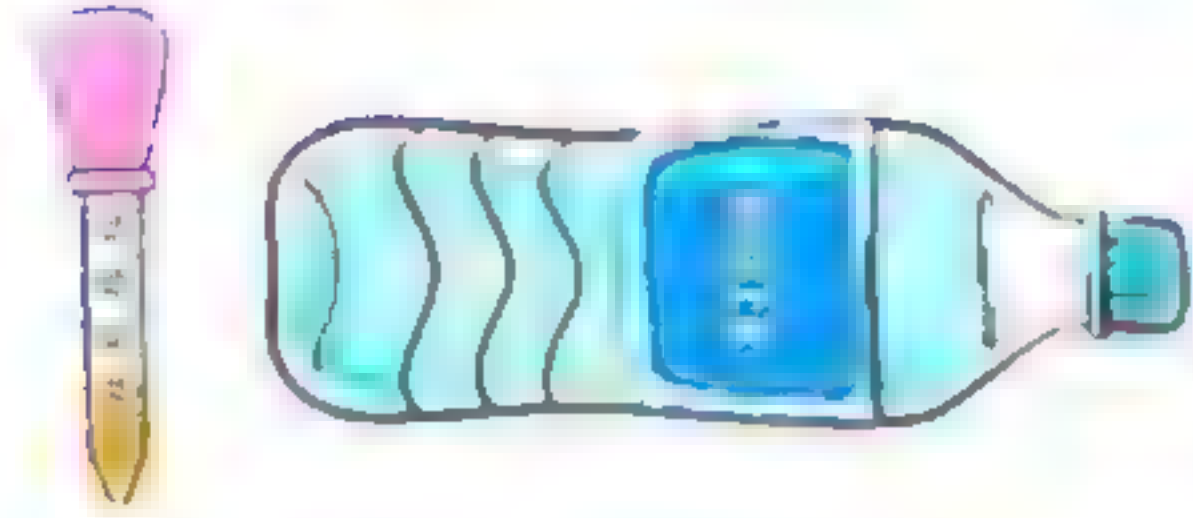
④  $3,003 \text{ g} = \dots\dots \text{ kg}, \dots\dots \text{ g}$  [ A - 3,3      B - 3,30      C - 3,300      D - 30,30 ]



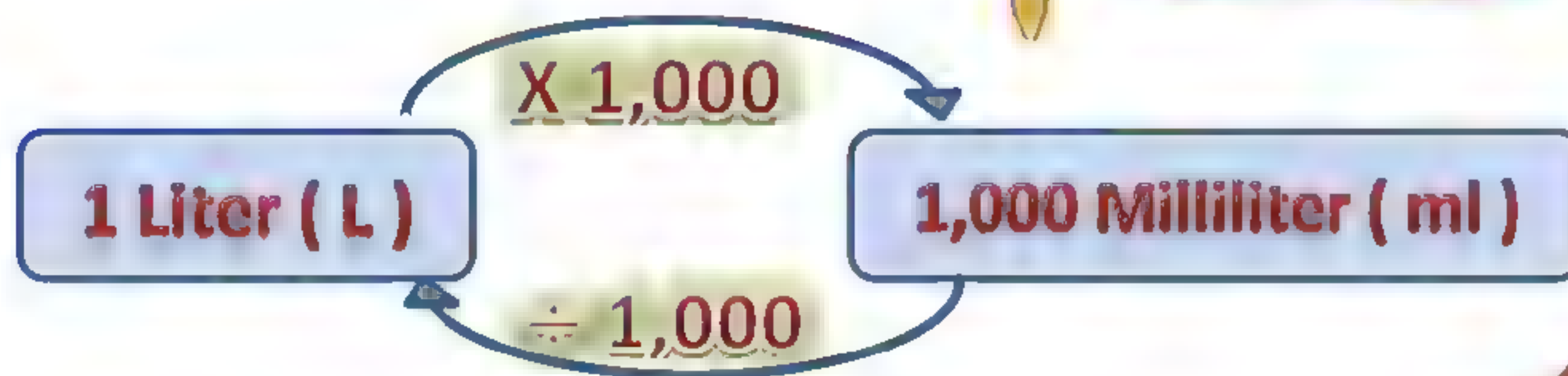


## lessons 3

## Capacity



## Capacity units :



$$1 \text{ L} = 1000 \text{ ml}$$

$$5 \text{ L} = 5000 \text{ ml}$$

$$2 \text{ L} , 75 \text{ ml} = 2,075 \text{ ml}$$

Ex① : complete the following :

①  $2 \text{ L} = \dots\dots\dots \text{ ml}$

②  $8,000 \text{ ml} = \dots\dots\dots \text{ L}$

③  $9 \text{ L} , 500 \text{ ml} = \dots\dots\dots \text{ ml}$

④  $11 \text{ L} = \dots\dots\dots \text{ ml}$

⑤  $17,000 \text{ ml} = \dots\dots\dots \text{ L}$

⑥  $7 \text{ L} , 228 \text{ ml} = \dots\dots\dots \text{ ml}$

⑦  $37 \text{ L} = \dots\dots\dots \text{ ml}$

⑧  $65,000 \text{ ml} = \dots\dots\dots \text{ L}$

⑨  $14 \text{ L} + 42 \text{ ml} = \dots\dots\dots \text{ ml}$

⑩  $7 \text{ L} = \dots\dots\dots \text{ ml}$

⑪  $4,000 \text{ ml} = \dots\dots\dots \text{ L}$

⑫  $6,350 \text{ ml} = \dots\dots \text{ L} , \dots\dots\dots \text{ ml}$

⑬  $35 \text{ L} = \dots\dots\dots \text{ ml}$

⑭  $70,000 \text{ ml} = \dots\dots\dots \text{ L}$

⑮  $5,005 \text{ ml} = \dots\dots \text{ L} , \dots\dots\dots \text{ ml}$

## Exercise ①

①  $3 \text{ L} = \dots\dots\dots \text{ ml}$

②  $4,000 \text{ ml} = \dots\dots\dots \text{ L}$

③  $2 \text{ L} , 400 \text{ ml} = \dots\dots\dots \text{ ml}$

④  $56 \text{ L} = \dots\dots\dots \text{ ml}$

⑤  $10,000 \text{ ml} = \dots\dots\dots \text{ L}$

⑥  $5 \text{ L} , 855 \text{ ml} = \dots\dots\dots \text{ ml}$

⑦  $68 \text{ L} = \dots\dots\dots \text{ ml}$

⑧  $73,000 \text{ ml} = \dots\dots\dots \text{ L}$

⑨  $3 \text{ L} + 45 \text{ ml} = \dots\dots\dots \text{ ml}$

## Exercise ②

Choose the correct answer:

- ①  $7 \text{ L} , 14 \text{ ml} = \dots\dots\dots \text{ ml}$  [ A - 714      B - 147      C - 7,014      D - 1,407 ]
- ②  $18 \text{ L} , 3 \text{ ml} = \dots\dots\dots \text{ ml}$  [ A - 183      B - 318      C - 1,803      D - 18,003 ]
- ③  $10,000 \text{ ml} = \dots\dots\dots \text{ L}$  [ A - 100      B - 10      C - 1      D - 1,000 ]
- ④  $3,020 \text{ ml} = \dots\dots \text{ L} , \dots\dots\dots \text{ ml}$  [ A - 3 , 2      B - 3 , 20      C - 3 , 200      D - 30 , 20 ]





## Home Work

15

① Complete the following :

① 9kg = ..... g

② 80 L = ..... ml

③ 1,000 ml = ..... L

④ 5kg = ..... g

⑤ 9,000 ml = ..... L

⑥ 18,000 g = ..... kg

⑦ 6 L = ..... ml

⑧ 150 kg = ..... g

⑨ 8 kg , 75 g = ..... m

⑩ 8 L , 800 ml = ..... ml

② Choose the correct answer :

① 8 kg, 14 g = ..... g

A. 32

B. 814

C. 8,140

D. 8,014

② 5,500 ml = ..... l , ..... ml

A. 5 , 5

B. 5 , 50

C. 5 , 500

D. 50 , 500

③ 4L , 16 ml = ..... ml

A. 416

B. 4,160

C. 56

D. 4,016

④ 3 kg = ..... g

A. 3

B. 30

C. 3,000

D. 13,000

⑤ 5,000 ml = ..... L

A. 5

B. 50

C. 500

D. 50,000





## lessons 4

## What time is it ?



## Units of measuring times :

X 7

Week	1	2	3	4	.....
day	7	14	21	28	.....

X 24

day	1	2	3	4	.....
hour	24	48	72	96	.....

X 60

hour	1	2	3	4	.....
minute	60	120	180	240	.....

X 60

minute	1	2	3	4	.....
second	60	120	180	240	.....

## Ex① : complete the following :

① 5 weeks = ..... days

② 7 hours = ..... min

③ 5 days = ..... hours

④ 9 minutes = ..... second

⑤ 3 weeks , 5 days = ..... days

⑥ 3 hours , 30 min = ..... min

⑦ 5 days , 12 hours = ..... hours

⑧ 5 hours + 20 min = ..... min

⑨ 80 hours = ..... days , ..... hours

⑩ 45 days = ..... weeks , .....

## Exercise ①

① 4 weeks = ..... days

② 3 hours = ..... min

③ 6 days = ..... hours

④ 7 minutes = ..... second

⑤ 2 weeks , 5 days = ..... days

⑥ 5 hours , 30 min = ..... min

⑦ 3 days , 12 hours = ..... hours

⑧ 3 hours + 20 min = ..... min

⑨ 100 hours = ..... days , ..... hours

⑩ 60 days = ..... weeks , .....





## lessons 5

## How long does it take ? ( Elapsed time )

① Laila entered a shopping mall, spent 2 hours, 40 minutes shopping, and spent 50 minutes at lunch in a restaurant, and then left the mall. How long did Laila spend in the mall?

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② Yasser finds that a cinema show is full when he arrives at 7:50 A.M. next show begins at 9:30 A.M. How long will he have to wait for the next show?

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Bassem left school at 2:30 P.M. and arrived home 35 minutes later. What time did Bassem arrive home?

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Peter completed a bike ride 3 hours and 26 minutes after he started. He started the bike ride at 8:15 A.M. At what time did he finish?

### Exercise ①

Mona's birthday party started at 7:00 in the evening. It took around 2 hours and 40 minutes for the party to get over. What is the time at which the party got over?

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## Home Work

15

① Complete the following :

a. 3 weeks = .....days.

b. 2 hours = ..... minutes

c. 3 days= ..... hours.

d. 2 weeks = ..... days.

e. 5 minutes = ..... seconds.

f. 10 days= ..... hours.

g. 3 hours= ..... minutes.

h. 2 minutes = ..... seconds.

i. 25 days= ..... weeks, ..... days.

j. 130 minutes = .....hours, ..... minutes.

② Choose the correct answer :

① 5 weeks, 5 days =..... days.

A. 10

B. 25

C. 40

D. 50.

② 2 days and 2 hours = ..... hours.

A. 22

B. 4

C. 62

D. 50

③ 1 day and 5 hours= ..... hours.

A. 29

B. 62

C. 65

D. 35

④ 2:50+40 minutes = .....

A. 2:10

B. 3:10

C. 2:54

D. 3:30

⑤ At 9:20 A.M. a teacher set a timer for 30 minutes quiet reading time. What time will it be when the timer rings?

A. 9:50 P.M.

B. 9:50A.M.

C. 9:10A.M

D. 10:05 P.M.

لغز : ما الأثقل في الوزن طن الحديد أم طن الورق؟





## lessons 6

# Measuring the world around me

## Part 1 : use addition and subtraction

① Ali and Giovanni each caught a fish. The two fish have a mass 8,250 g The mass of Giovanni's fish is 3 kg,530 g What is the mass of Ali's fish?

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② A tailor used 1 m, 35 cm of cloth to make a shirt and 2 m, 15 cm to make trousers. What is the total length of cloth used by the tailor to make a shirt and trousers?

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③ A fish tank with a capacity of 92 liters is filled with 23,000 milliliters of water. How many more liters of water are needed to fill it up completely?

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### Exercise ①

Ahmed studied from 3: 15-4:45. His sister, Sarah studied from 4:30-6:15 Who studied Longer and by how much?

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## lessons 7

## Measuring the world around me

### Part 1 : use multiplying and division

① A colony of ants eats approximately 2,000 grams of food each day. If the ants have 10 kilograms of food stored, how many days will the food last?

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② Ants walk about 5,000 meters each day. How many kilometers do ants walk in 6 days?

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③ A water purifier cleans 10 L, 50 mL of water each day. How much water will be cleaned by the cleaner in 10 days?

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### Exercise ①

Sara travelled 9 days continuously. She travelled 5,000 meters each day. How many kilometers did she walk in all?

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## Home Work

15

## ① Answer the following :

① An ant may walk up to 5 km per day. If the ant continues this for 20 days, how many meters will the ant walk?

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② Ehab is a weightlifter. He has a mass of 100 kilograms. His aim is to gain 500 grams per week. If he does that for 5 weeks, what will his mass be at the end?

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③ Ayman is a runner. While Ayman is in training, he needs to drink 500 milliliters of water 4 times per day. How many liters of water will that be for 1 week?

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④ Samira is studying for an upcoming math test. If she studies for 30 minutes a day, how many hours will she have spent studying in 8 days?

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## Unit 4

## lessons 1

## Measuring lengths ( perimeter )

## Perimeter

The distance around a shape

## Perimeter of a rectangle

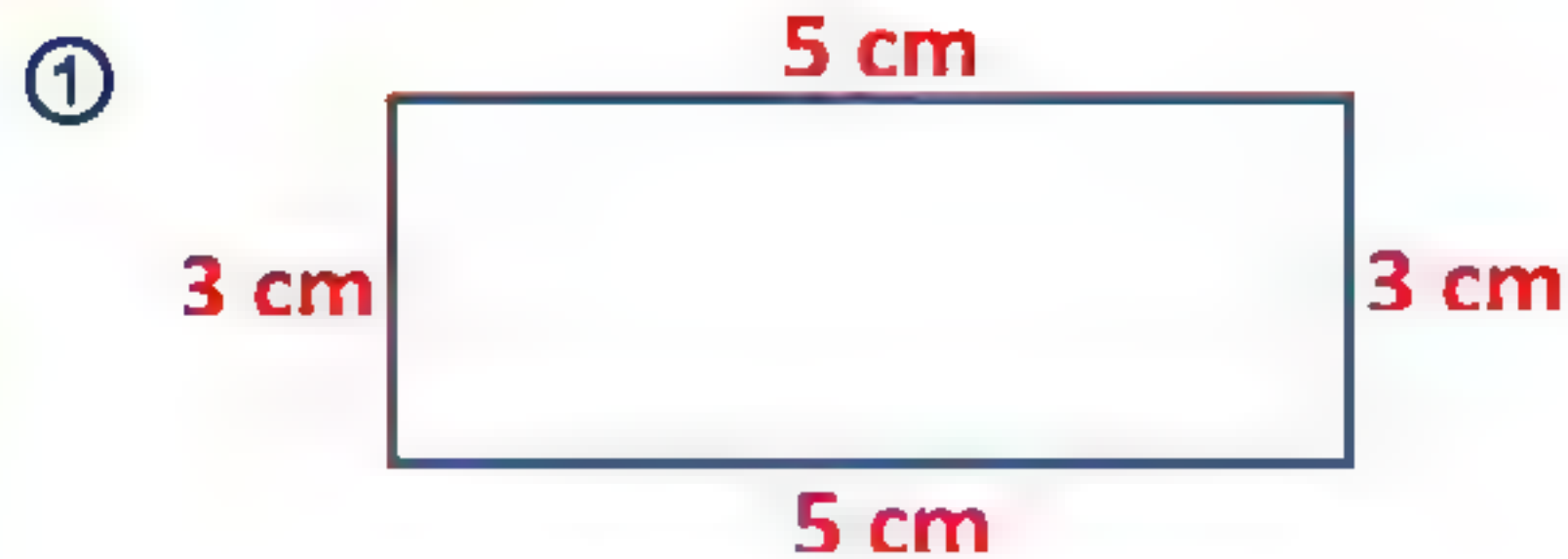
Perimeter of rectangle = length + width + length + width

$$P = L + W + L + W$$

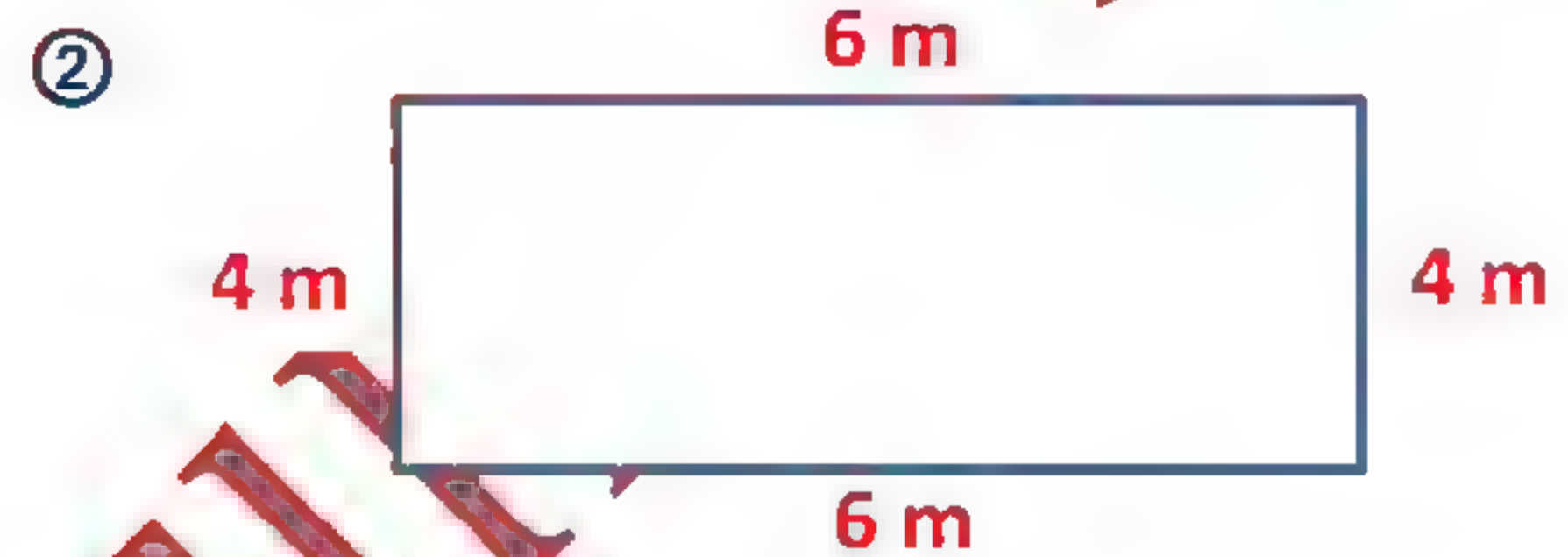
$$P = 2 \times [L + W]$$



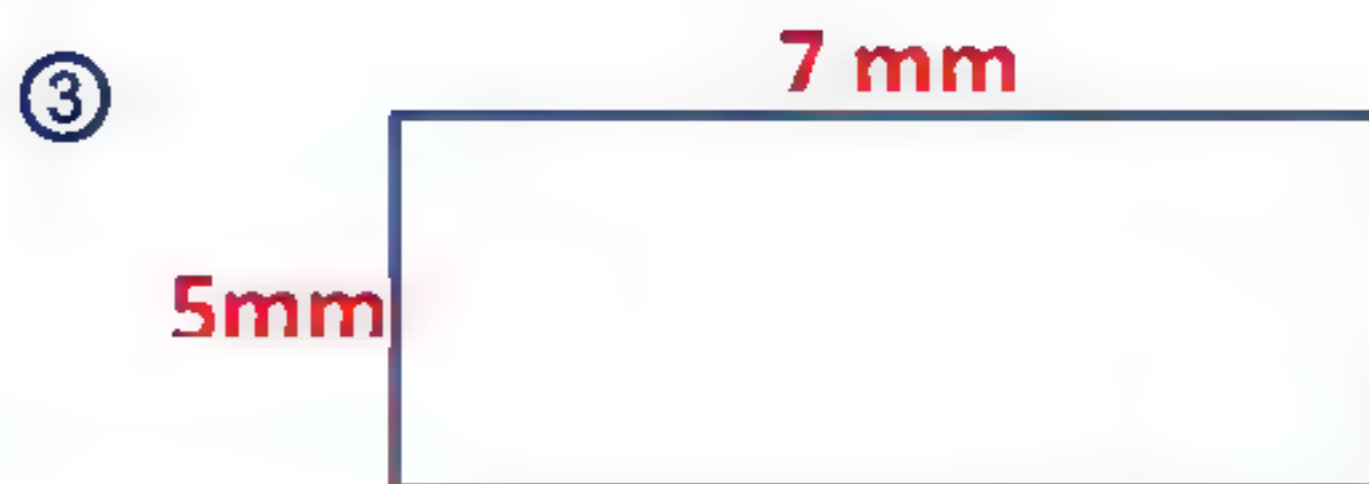
Ex① : Find the perimeter of the following rectangles :



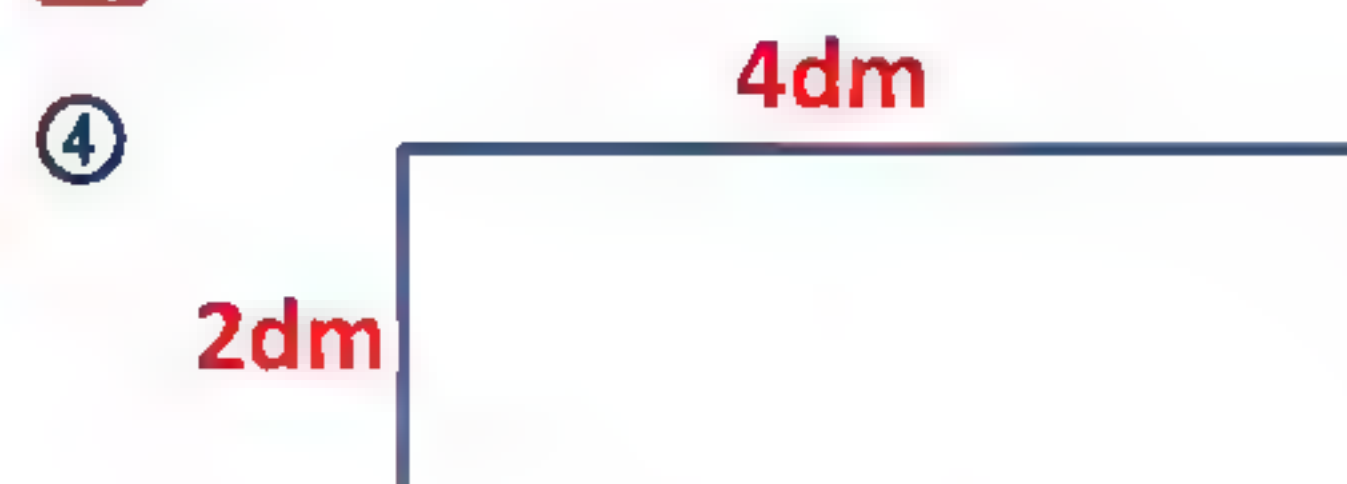
P = .....



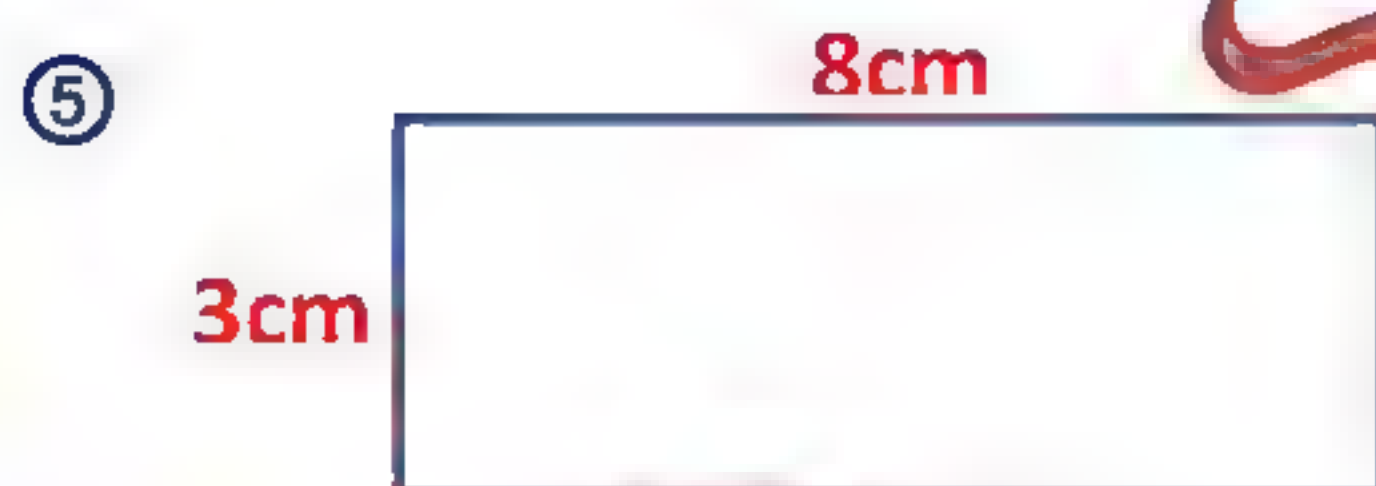
P = .....



P = .....



P = .....



P = .....



P = .....

Ex② : Answer the following :

① Rectangular gymnasium is 7 meters long and 4 meters wide. Find its perimeter

.....

.....

② Omar is building a rectangular fence around his garden. The length is 8 meters and the width is 6 meters. How many meters of fencing will he need to build?

.....

.....



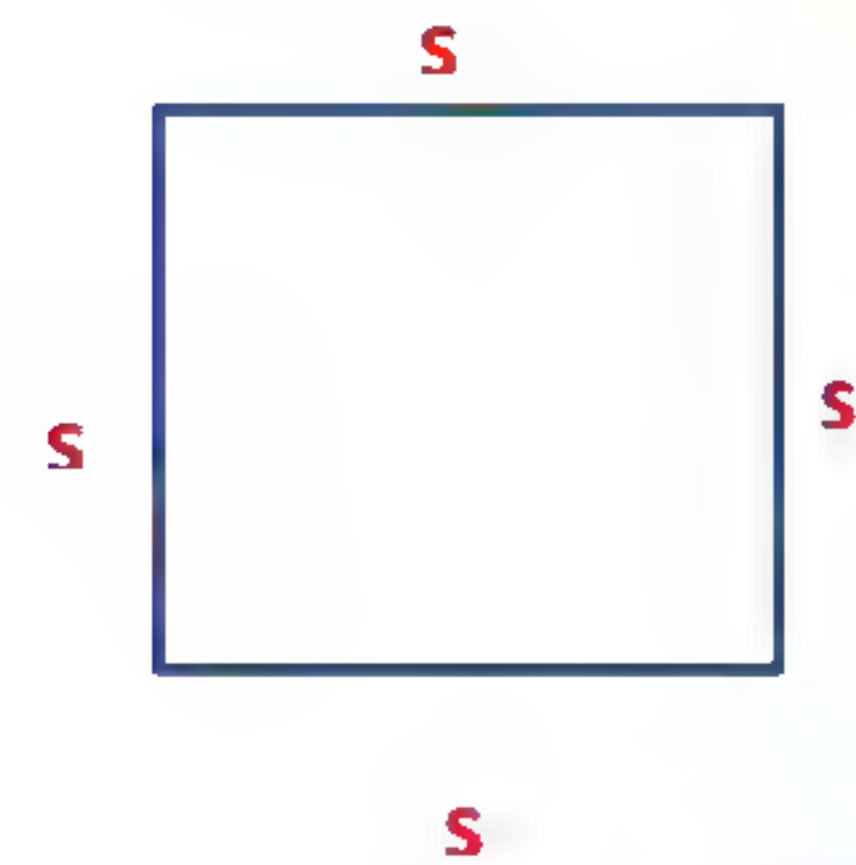


## Perimeter of a square

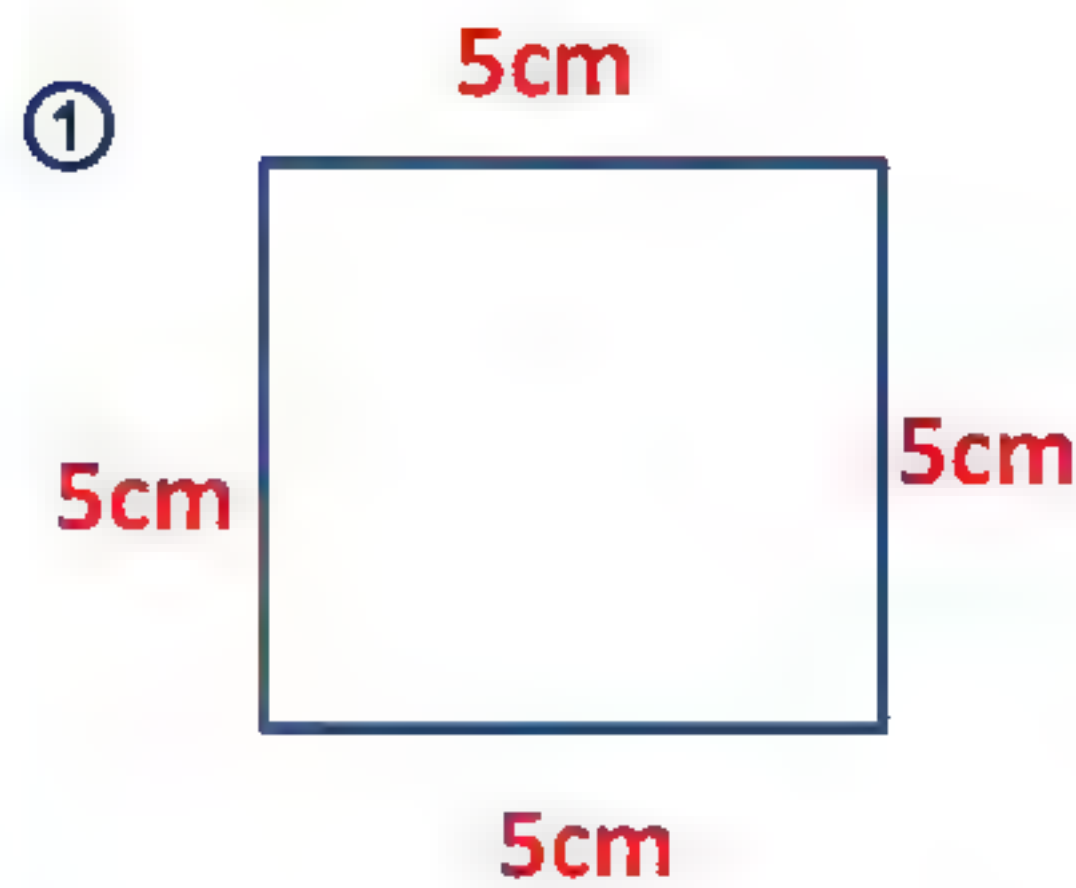
Perimeter of a square = Side + Side + Side + Side

$$P = S + S + S + S$$

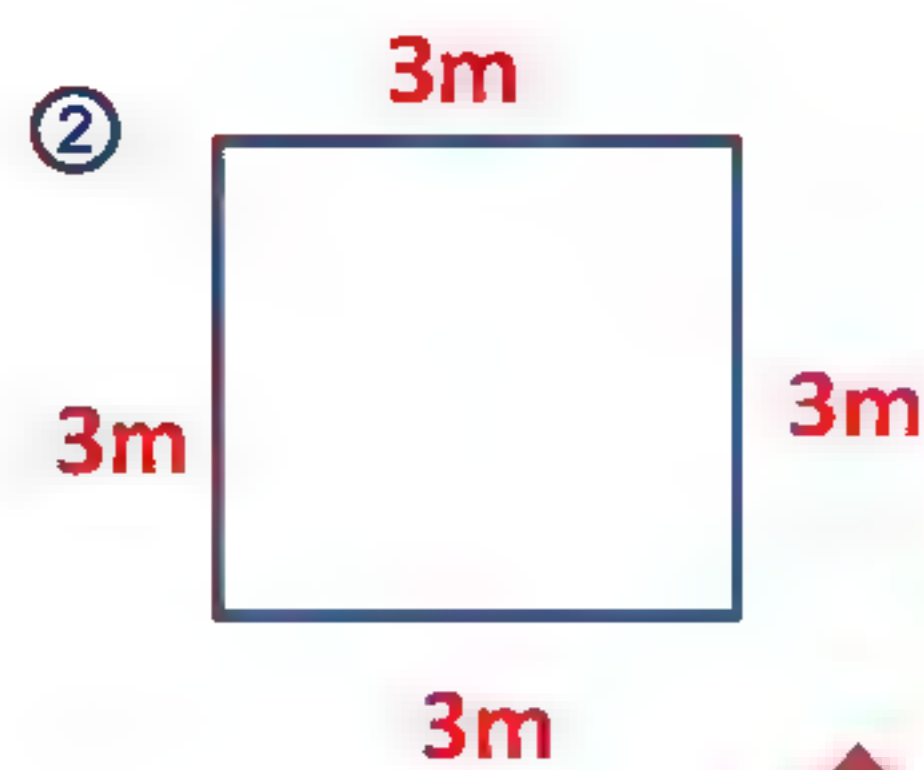
$$P = 4 \times S$$



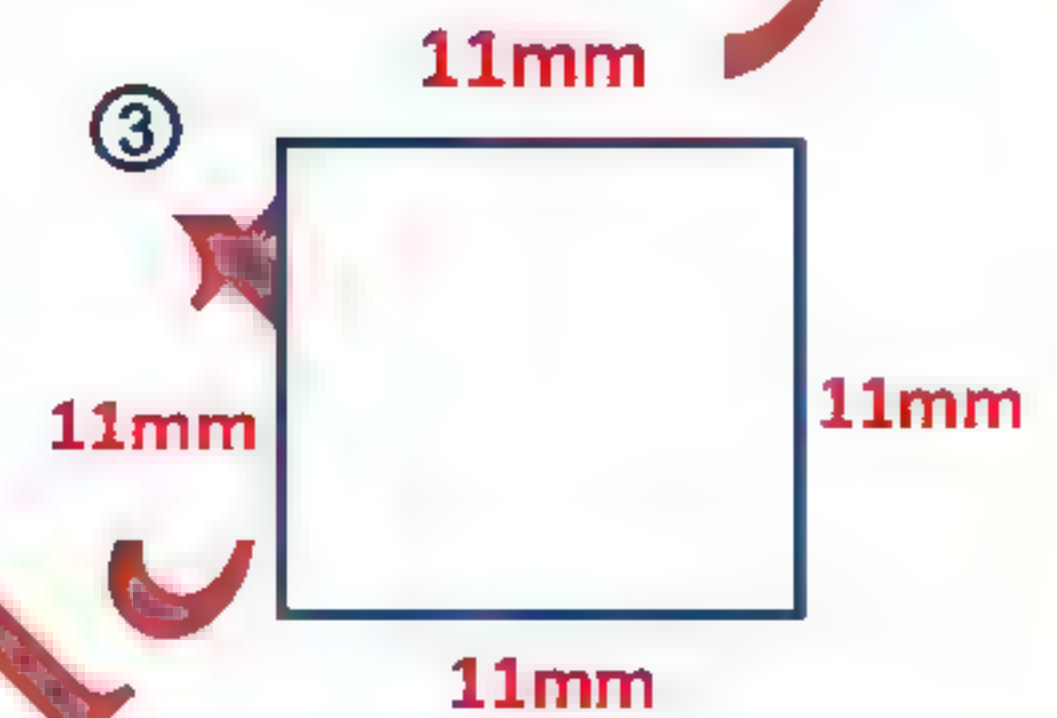
**Ex①** : Find the perimeter of the following squares :



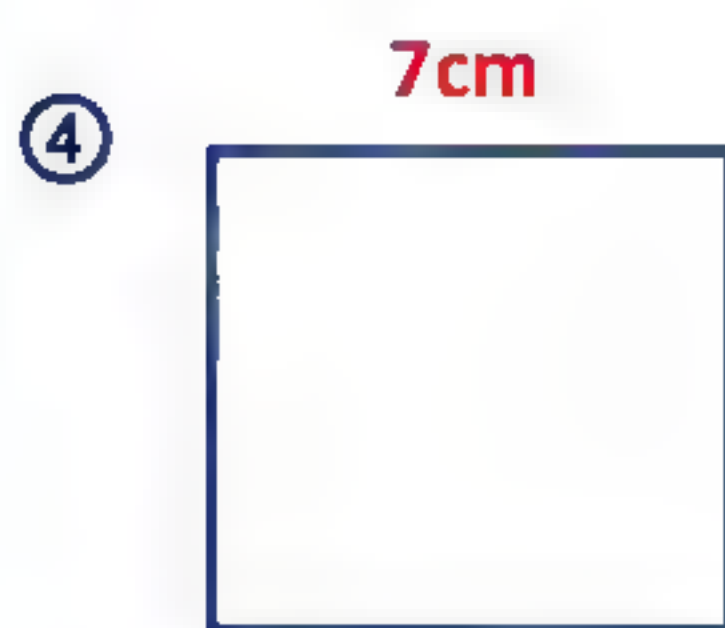
P = .....



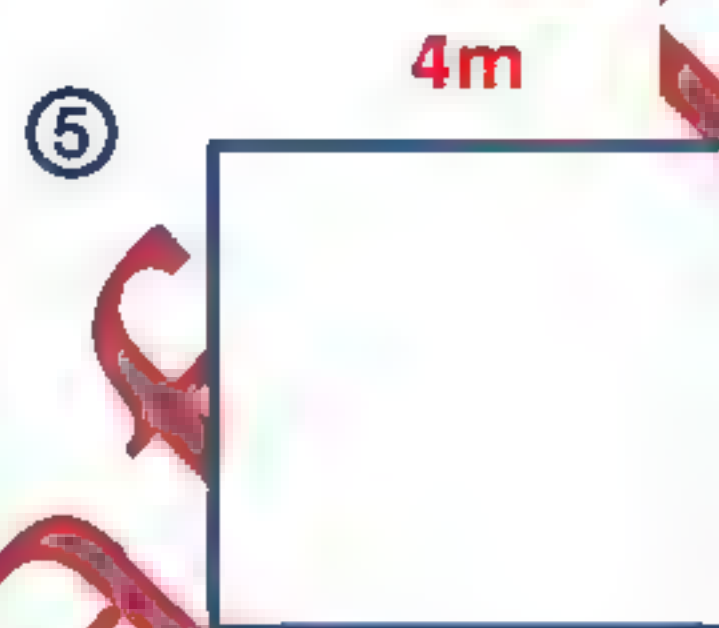
P = .....



P = .....



P = .....



P = .....



P = .....

**Ex②** : Answer the following :

① Sarah is putting a border around the edge of a square cake. One side of the cake is 30 centimeters long. How long will the border of Sarah's cake be?

.....

.....

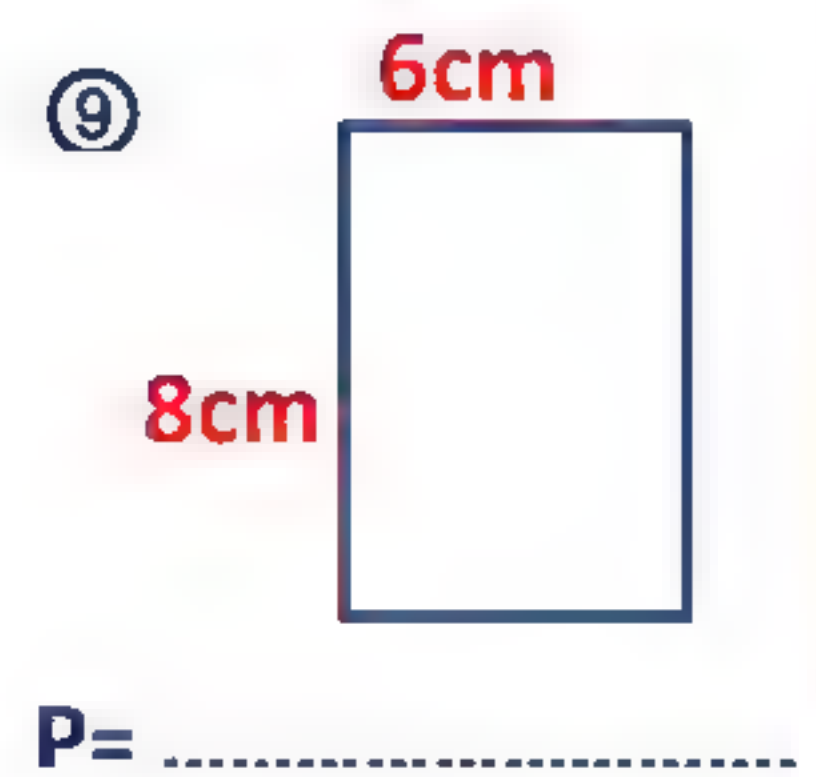
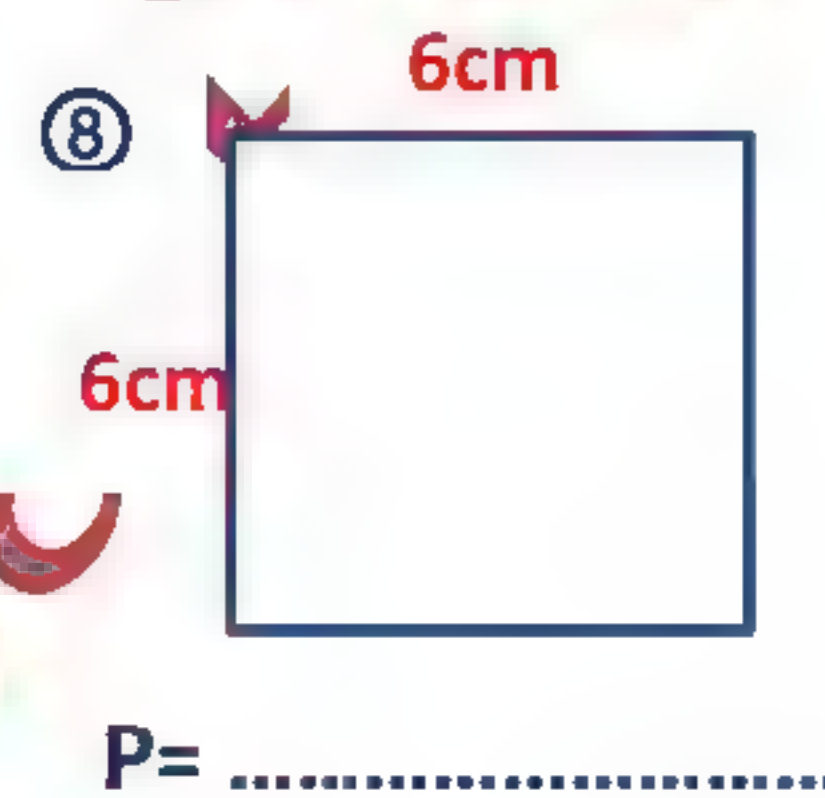
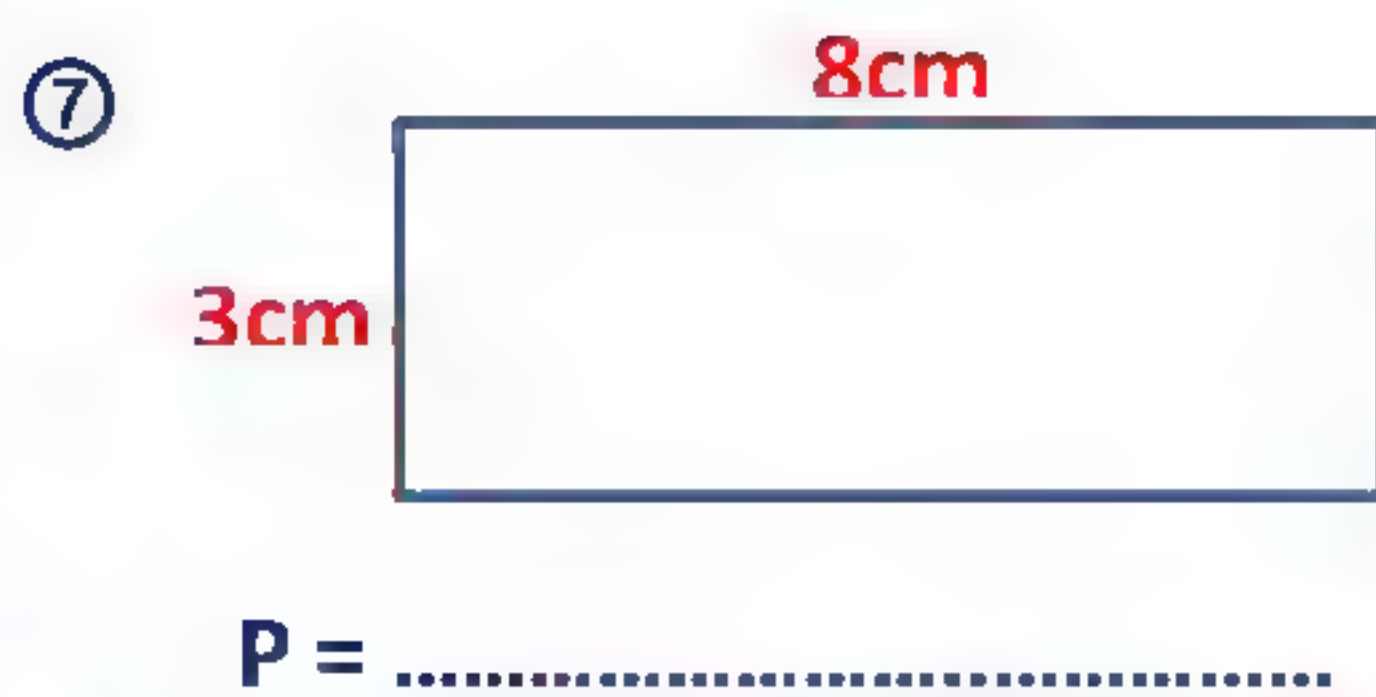
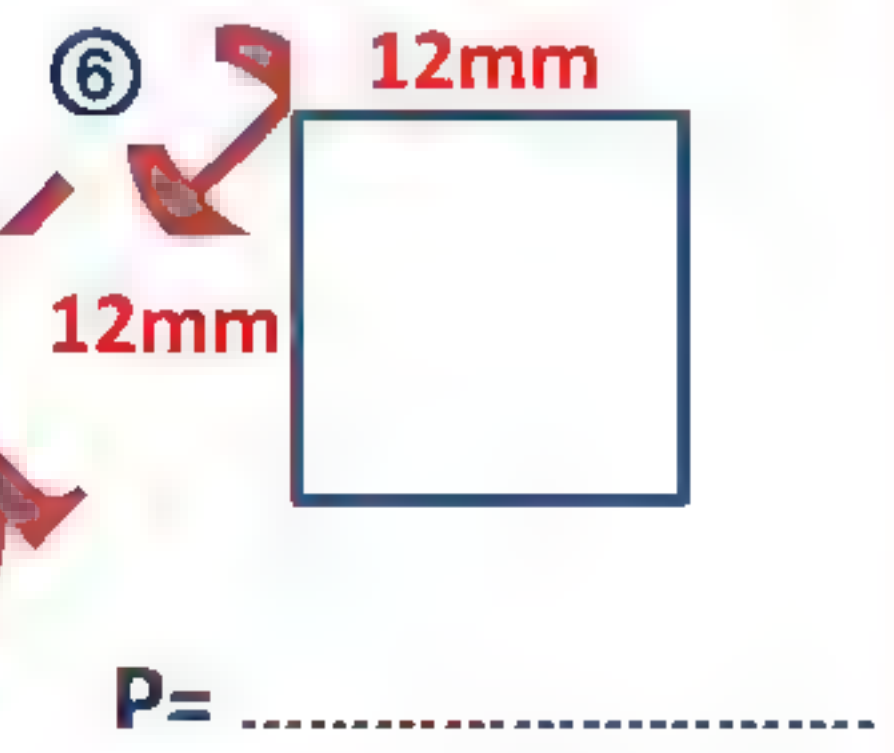
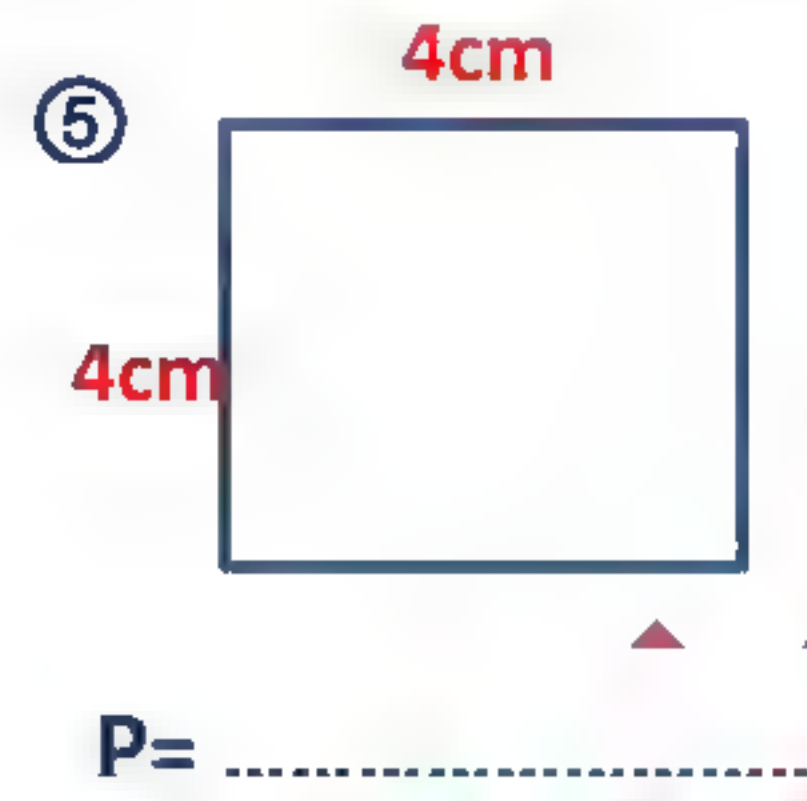
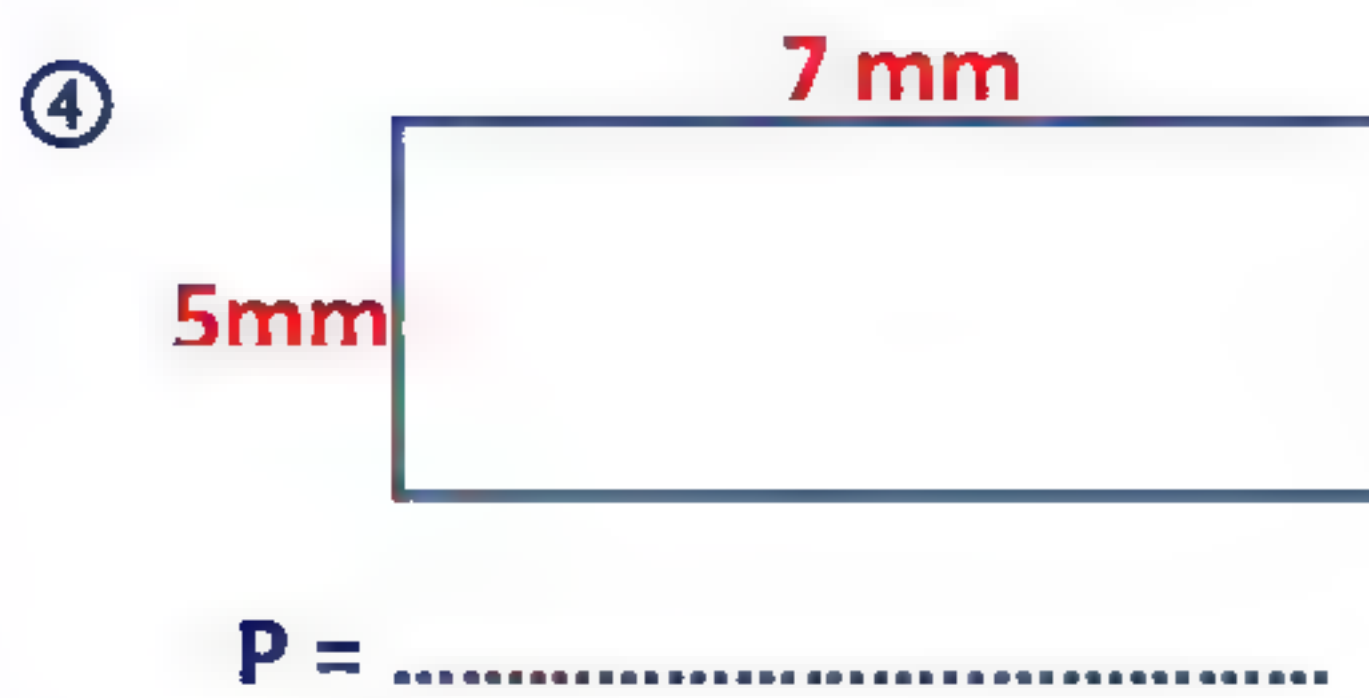
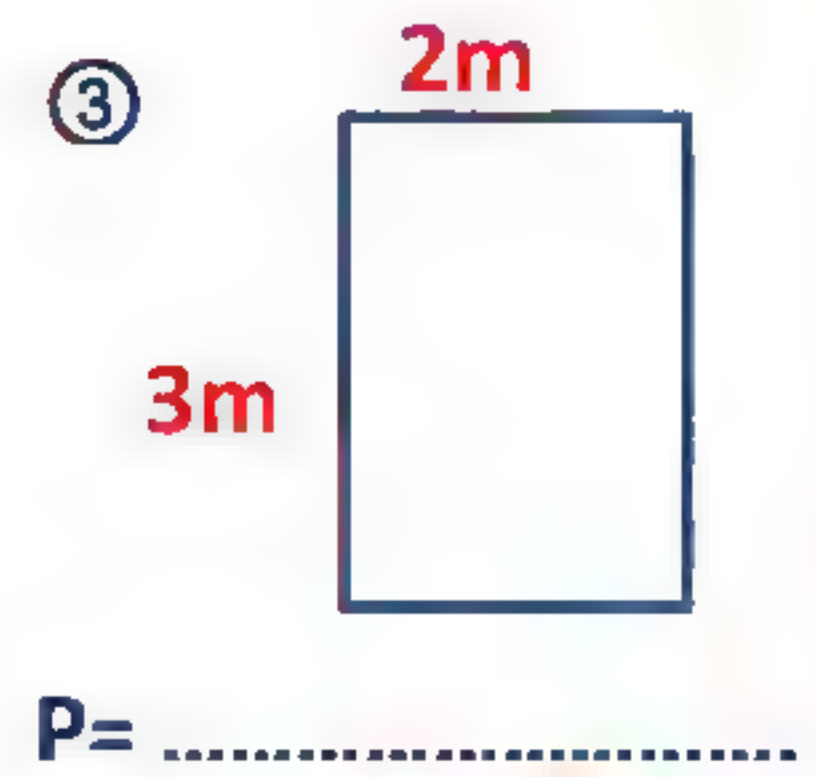
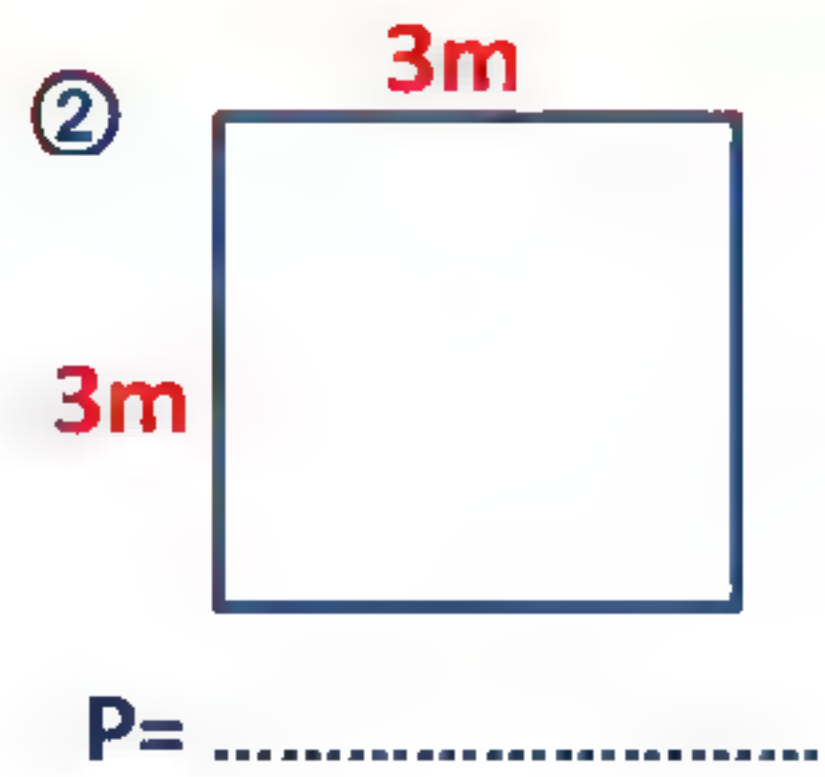
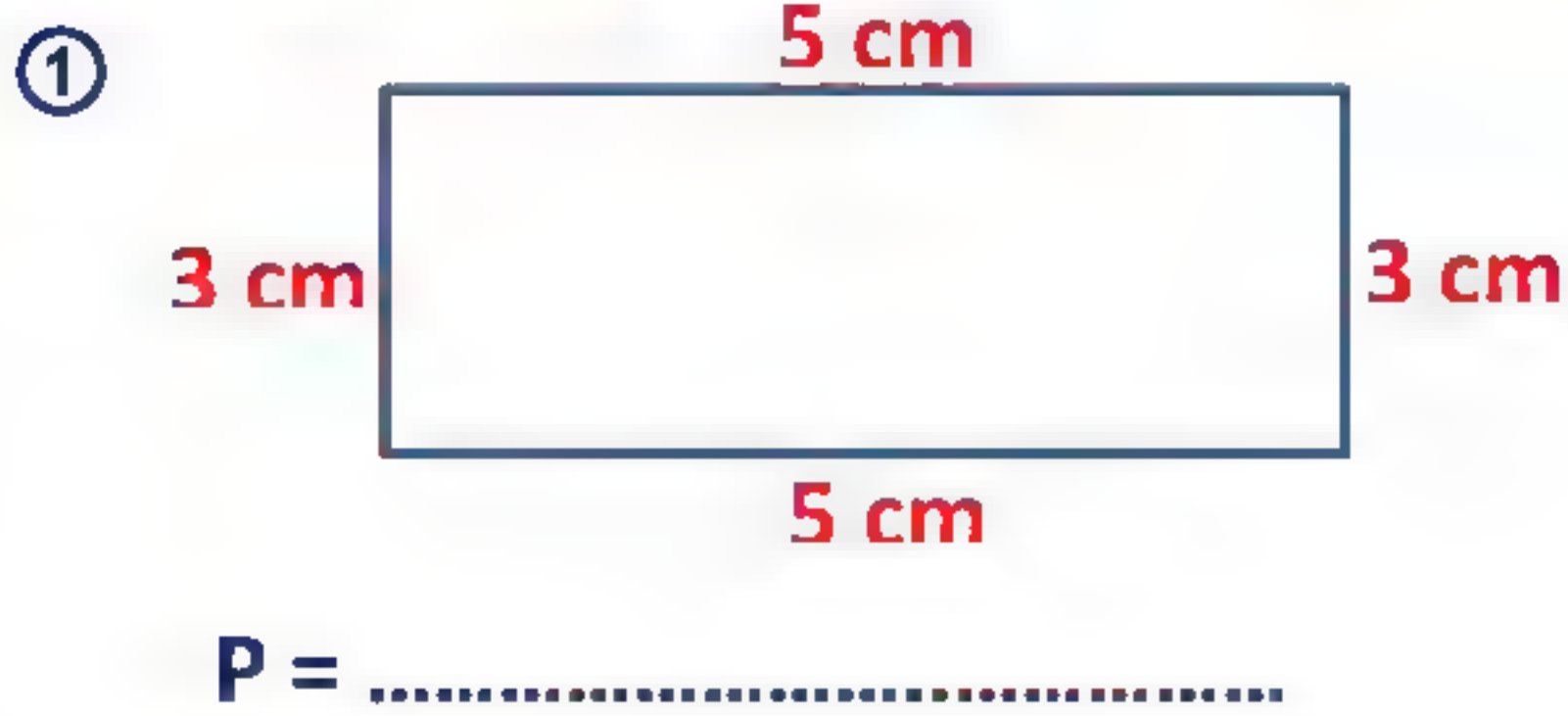
② Sherif is building a square picture frame. Each side will be 36 millimeters long. What will the perimeter of the frame be?

.....

.....





**Exercise ①**Find the perimeter of the following :**Exercise ②**Complete the following :

- ① A rectangle of 16 m length and 14 m width, its perimeter is .....
- ② A rectangle is 7 m long and 6 m width, its perimeter is .....
- ③ The perimeter of a rectangle of 13 mm length and 5 mm width is .....
- ④ A square of side length 8 cm, its perimeter is .....
- ⑤ The perimeter of a square of side length 15 m is .....
- ⑥ A square of side length 9 cm, its perimeter is .....





## Home Work

15

① Complete the following :

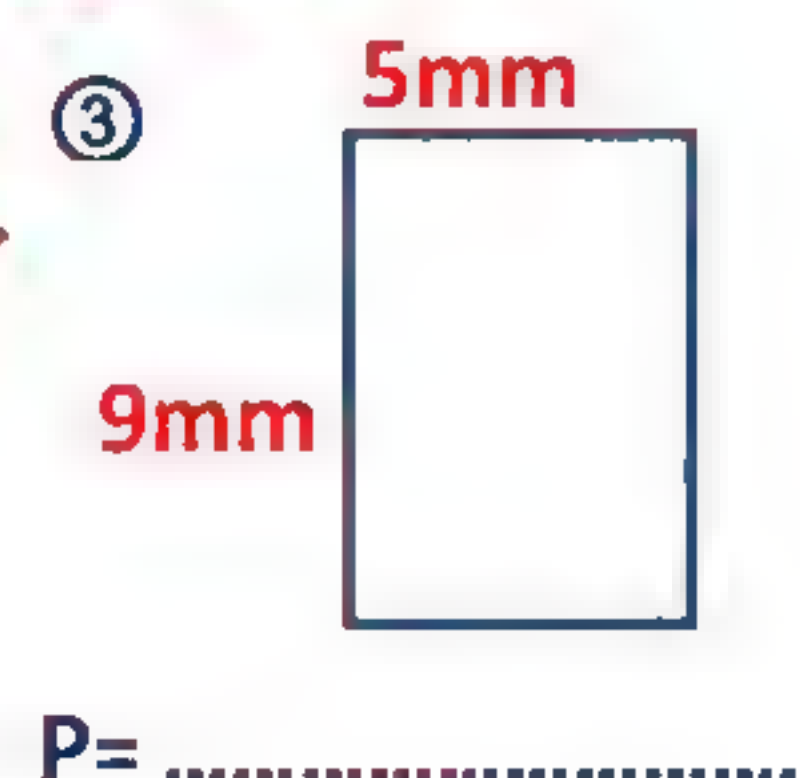
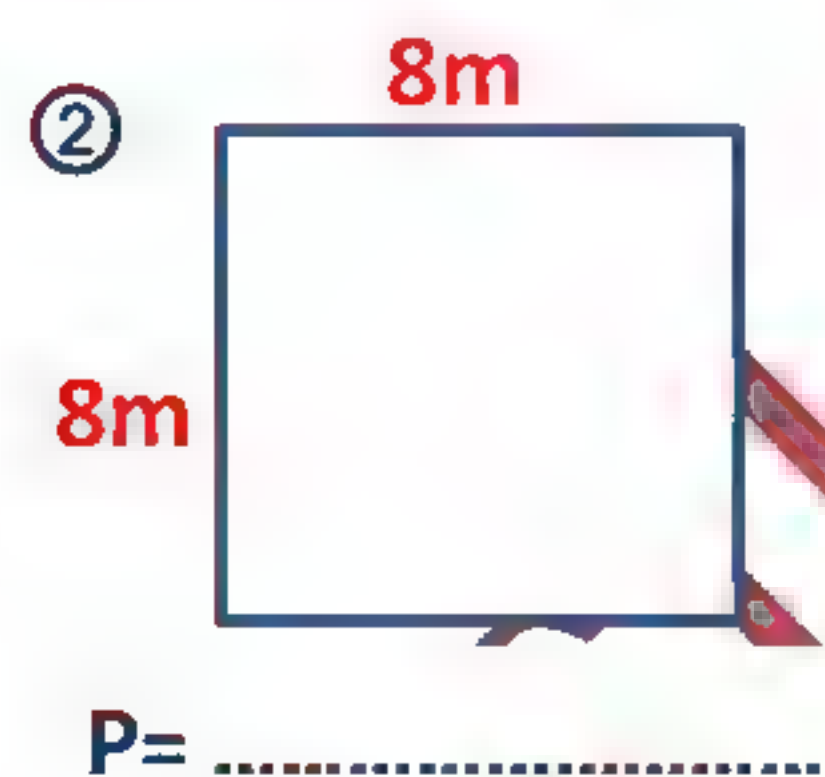
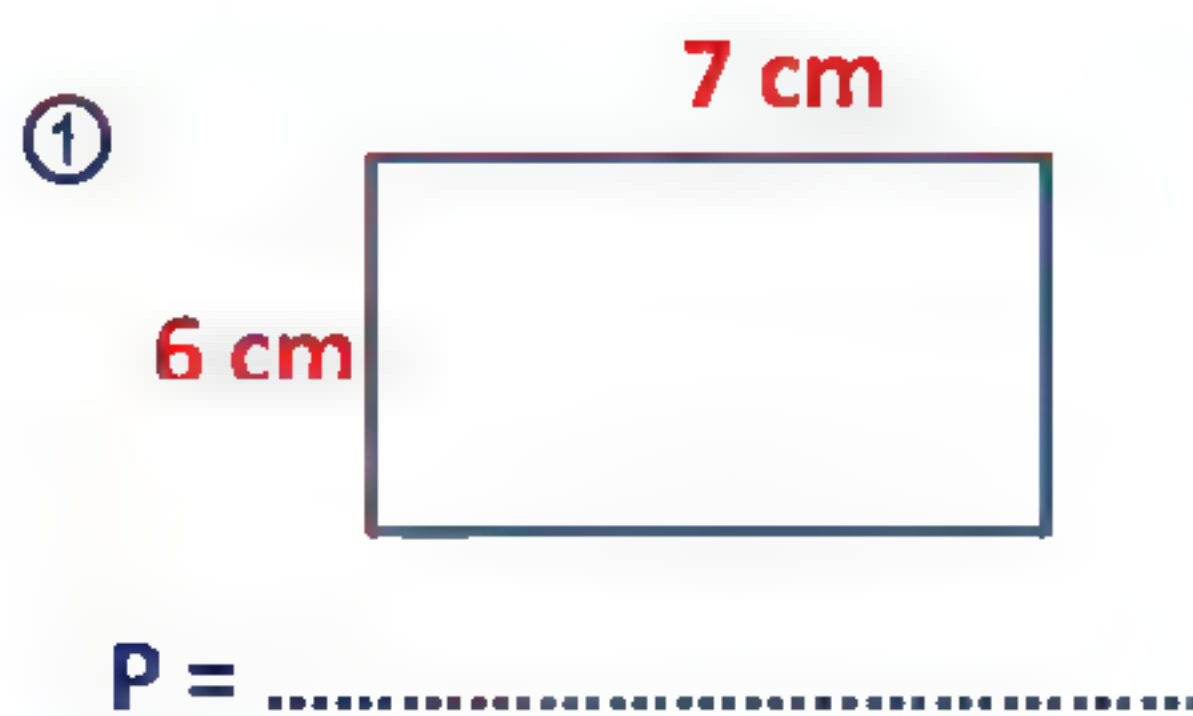
① A rectangle of 7 m length and 5 m width, its perimeter is .....

② A rectangle is 8 m long and 5 m width, its perimeter is .....

③ The perimeter of a rectangle of 15 mm length and 5 mm width is .....

④ A square of side length 20 cm, its perimeter is .....

⑤ The perimeter of a square of side length 6 m is .....

② Find the perimeter of the following :③ Choose the correct answer :

① A rectangle its length is L and its width is W What is it perimeter?

A.  $L+w$ B.  $L \times W$ C.  $2 \times [L + W]$ D.  $[2 \times L] + w$ 

② Which two choices show the formula for the perimeter of a rectangle?

A.  $P=2 \times (L+w)$ B.  $P=4 \times L$ C.  $P=L + W + L + W$ D.  $P= [2 \times L] \times [2 \times W]$ 

③ Which choice shows the formula for the perimeter of a square?

A.  $P=4+S$ B.  $P=4 \times S$ C.  $P=S \times S$ D.  $P=S + S$ 

④ The perimeter of a rectangle with two dimensions 10 cm and 5 cm is

A. 15 cm

B. 30 cm

C. 50 cm

D. 45 cm

⑤ A square of side length 7 cm, its perimeter =

A. 11 cm

B. 21 cm

C. 28 cm

D. 49 cm

④ Answer the following questions :

① Rectangular piece of land is 8 meters long and 6 meters wide. Find its perimeter

.....

.....





## lessons 2

## The Area

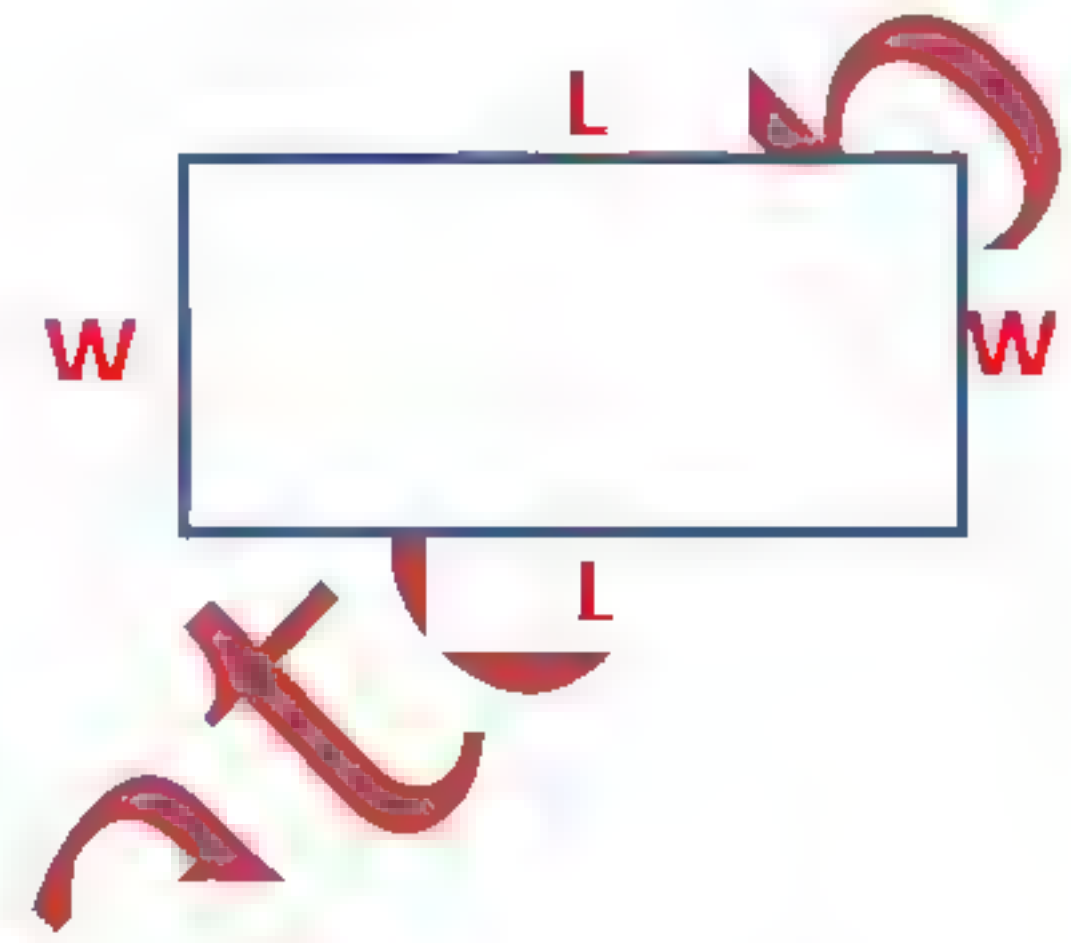
Math tip

You can write square meters as  $m^2$   
 , and write square centimeters as  $cm^2$

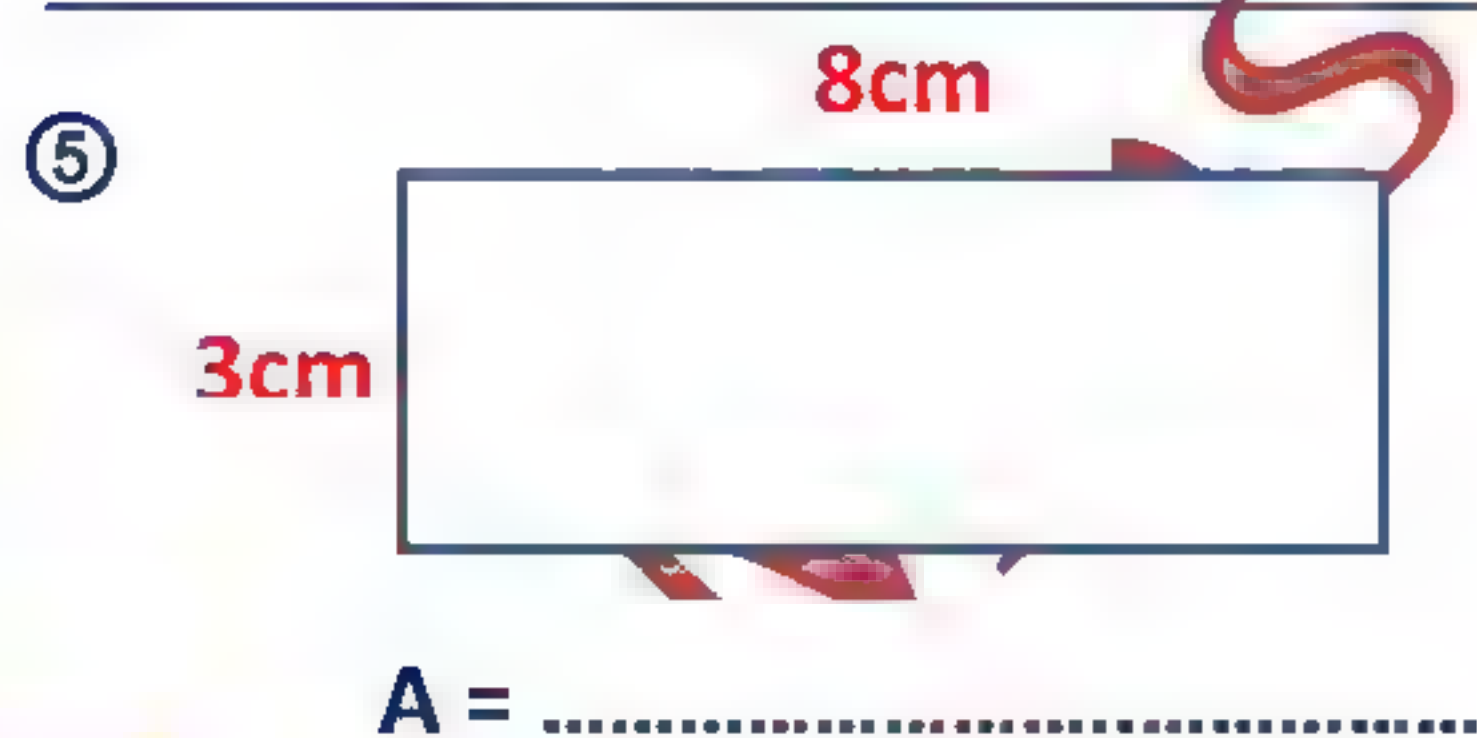
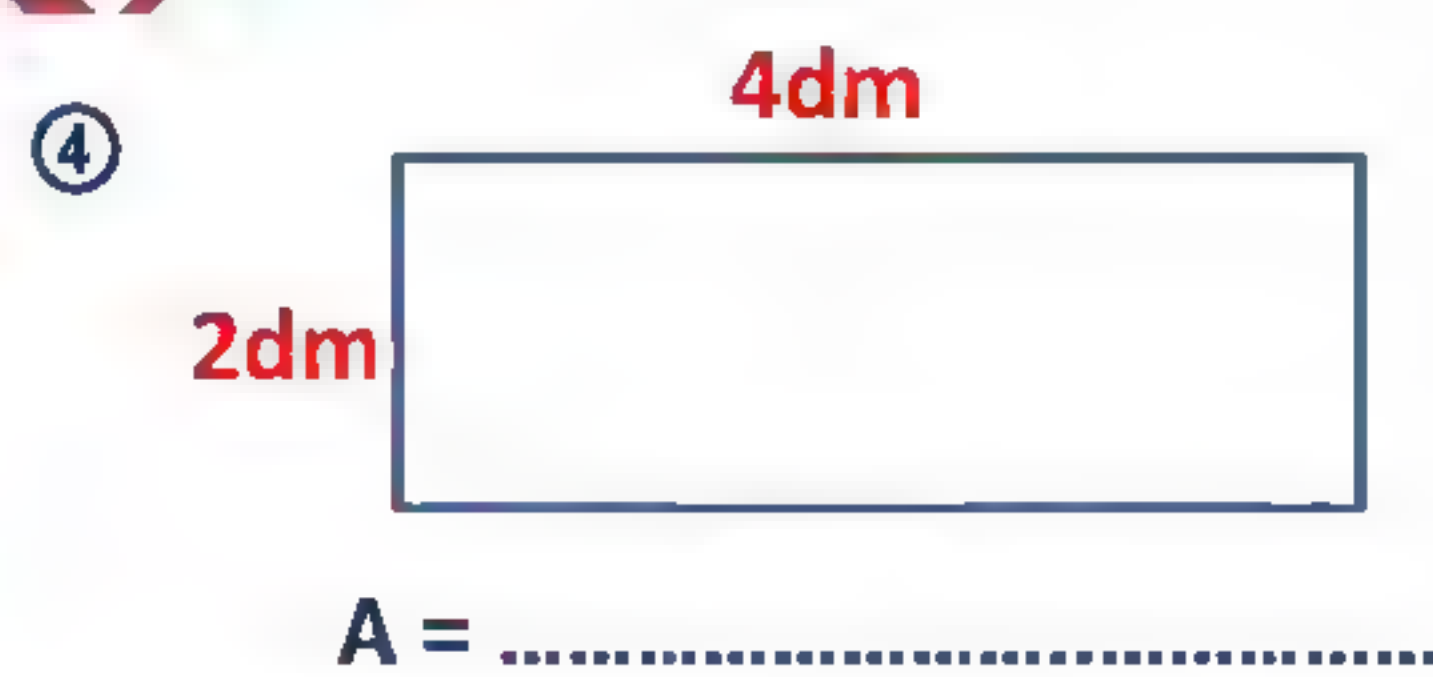
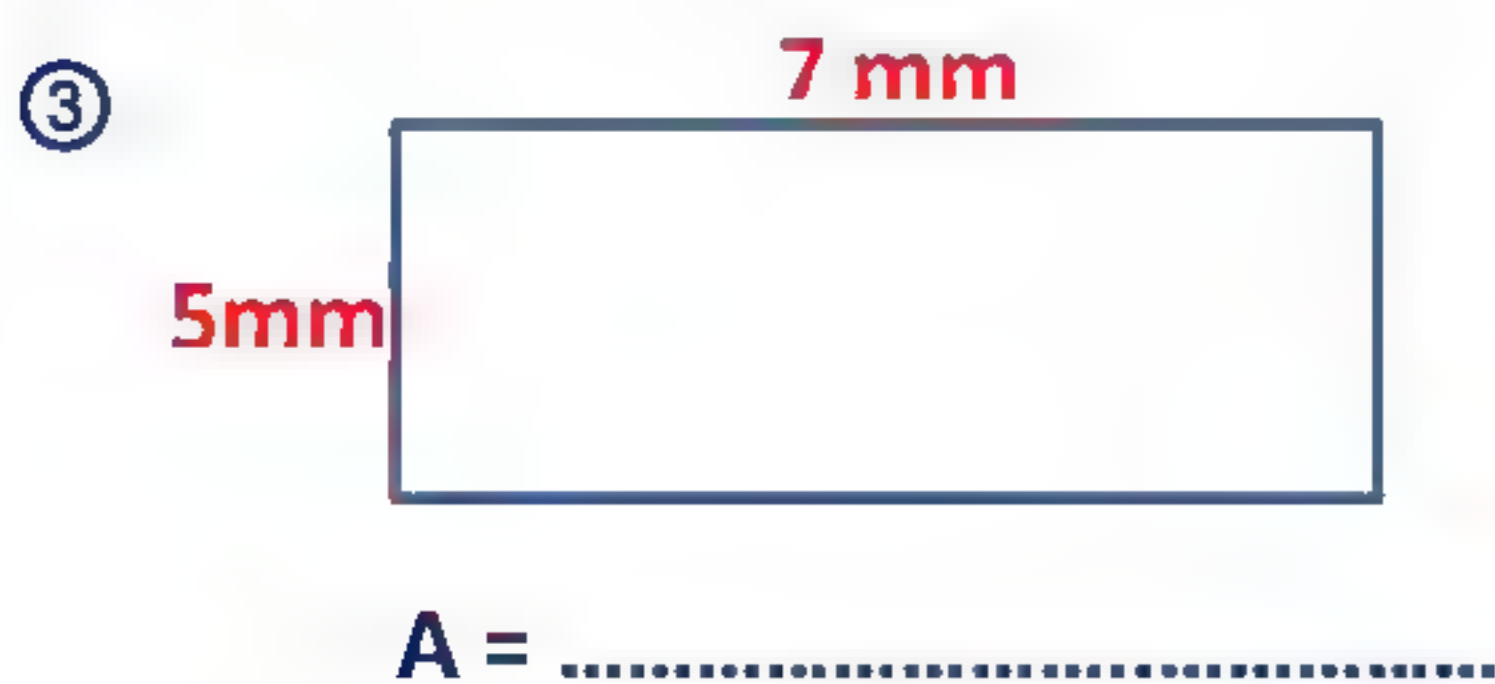
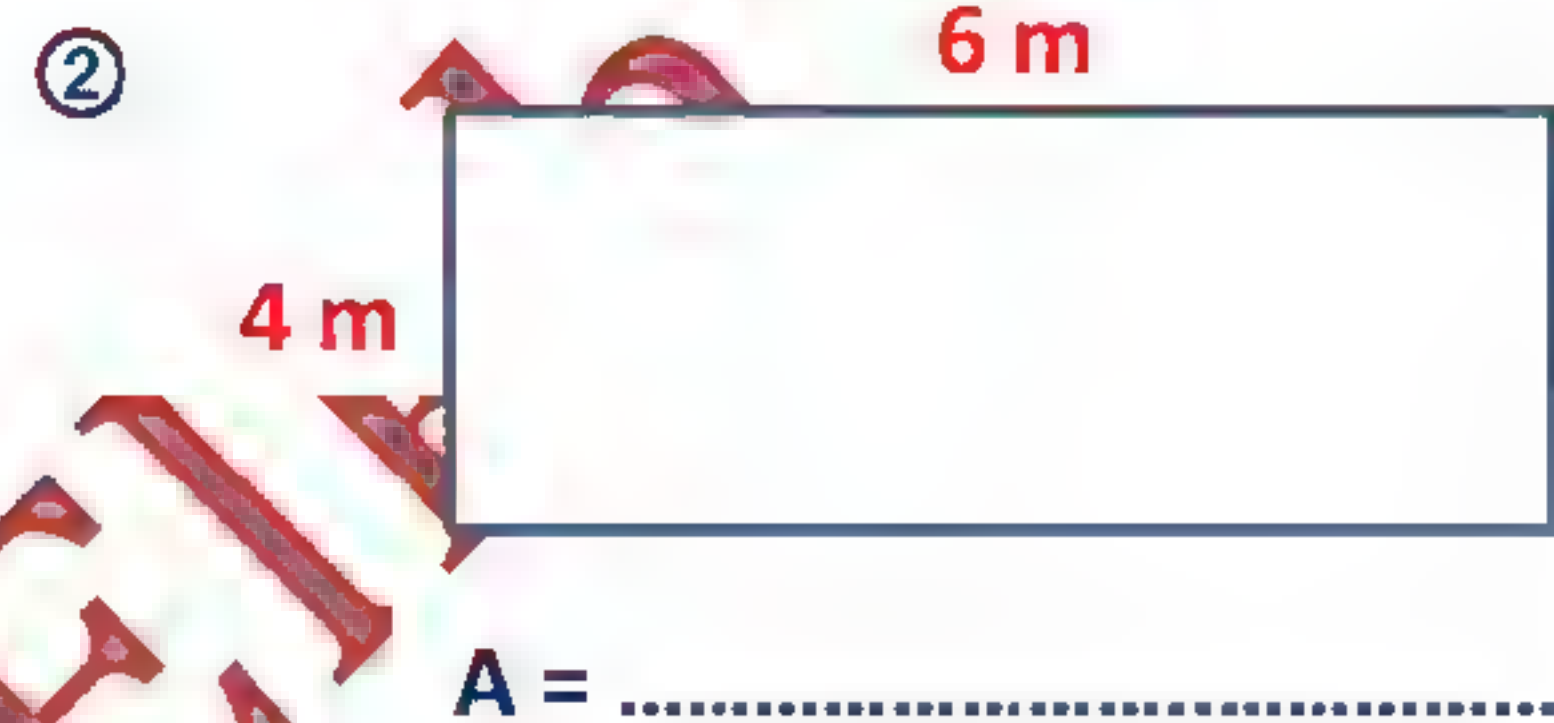
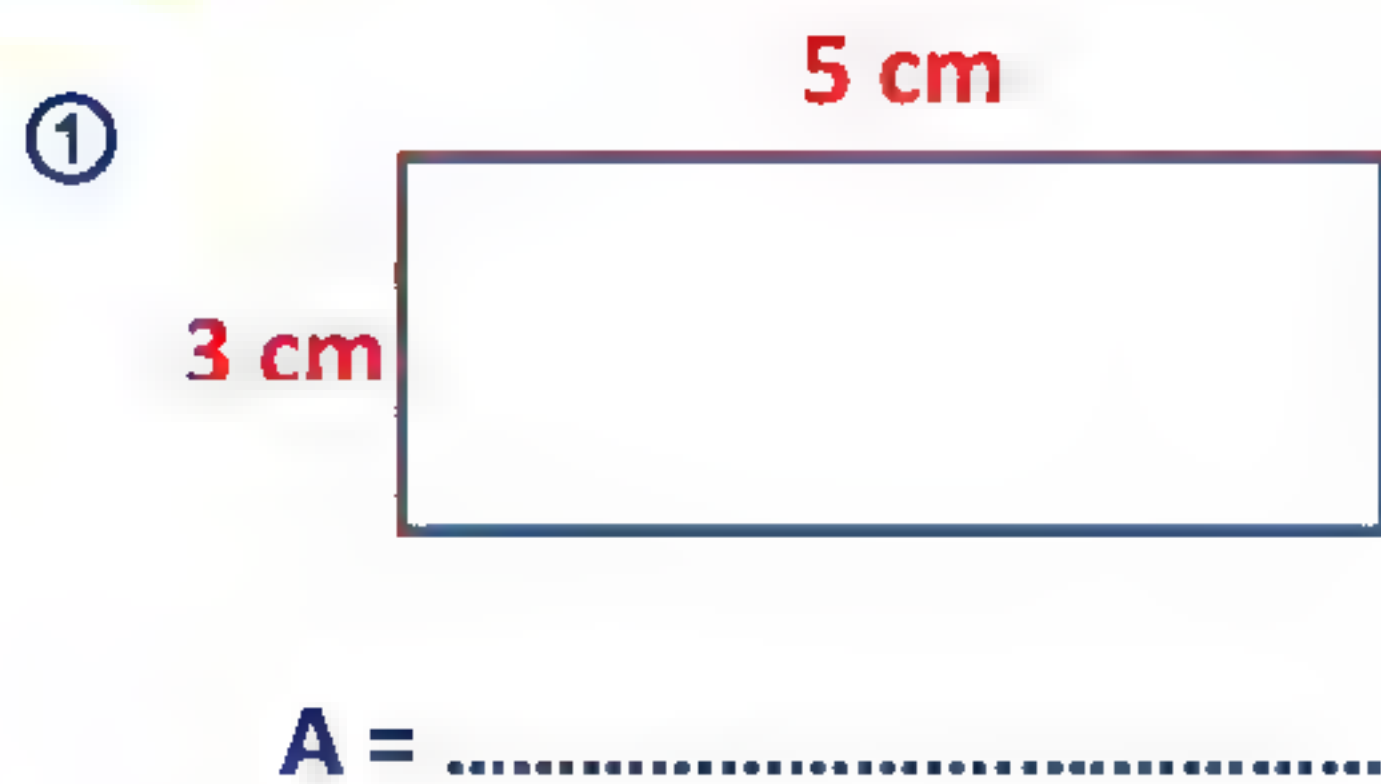
**Area**  
 Amount of space INSIDE  
 an object

## Area of a rectangle

Area of rectangle = length x width  $A = L \times W$



**Ex①** : Find the area of the following rectangles :



**Ex②** Answer the following :

① Rectangular shaped table with 7 meters long and 4 meters wide. Find its area

.....

.....

② A square picture of side length 8 cm. Hussein wants to cut a piece of glass to cover this picture, what is the area of the glass piece?

.....

.....

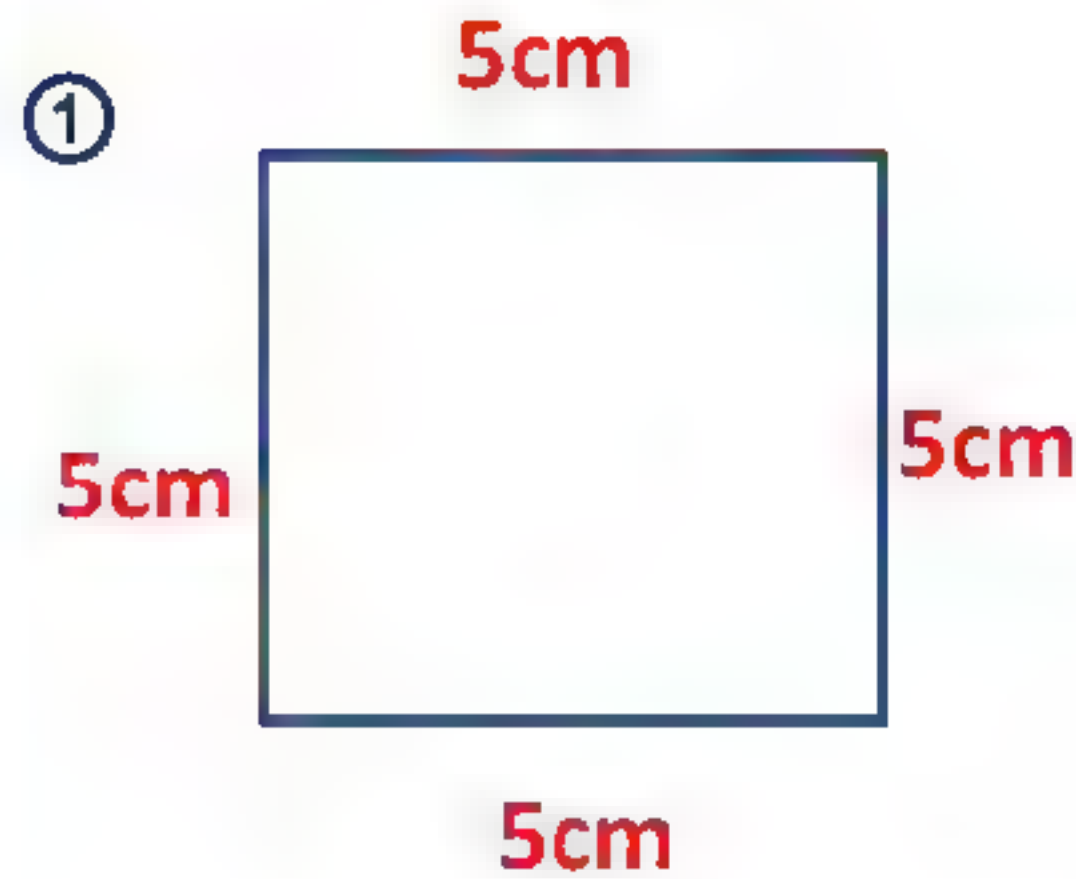




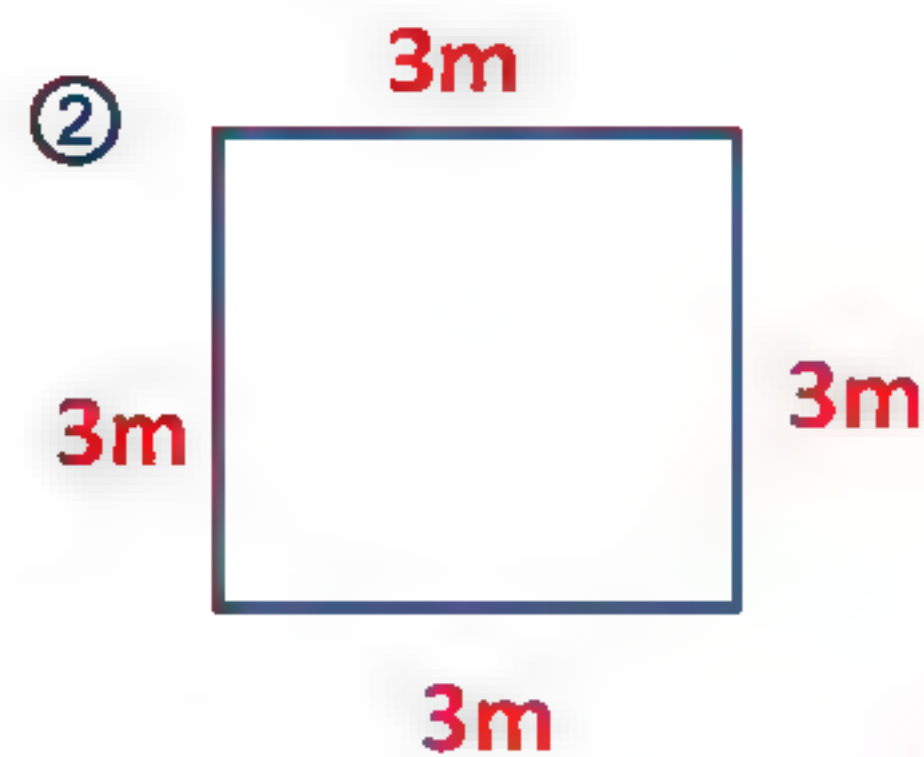
## Area of a square

Perimeter of a square = Side x Side

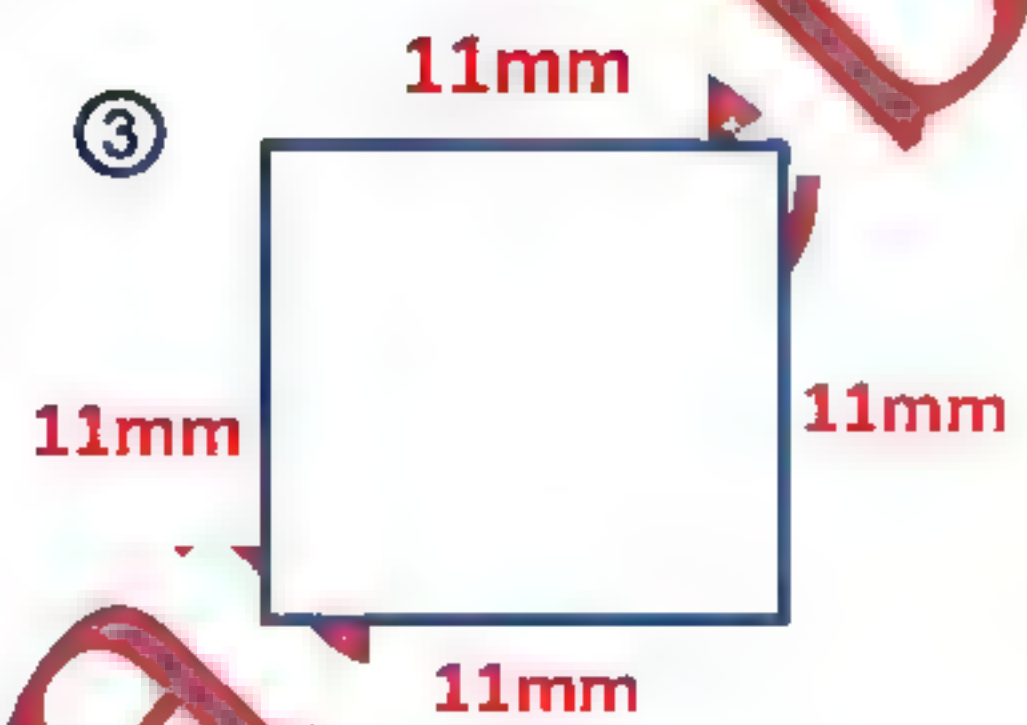
$$P = S \times S$$

**Ex① :** Find the Area of the following squares :

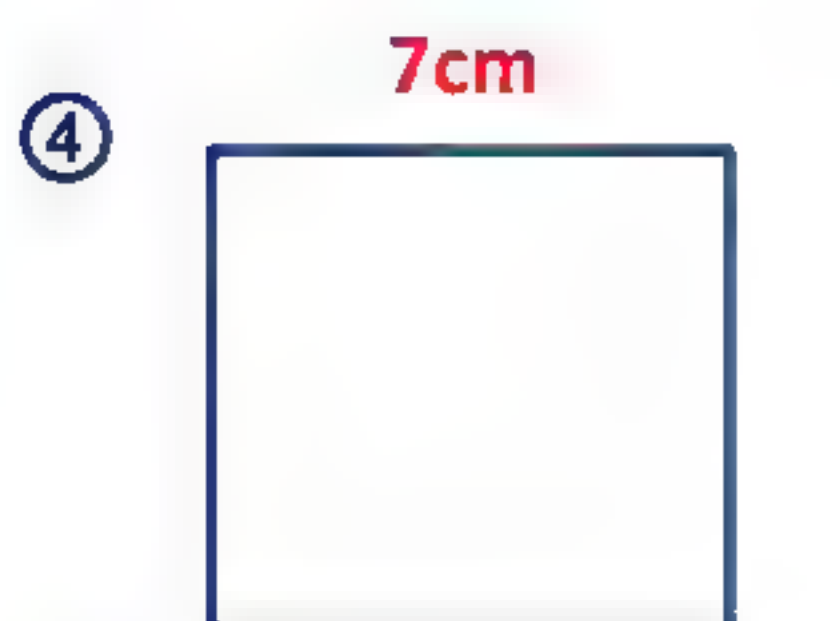
A = .....



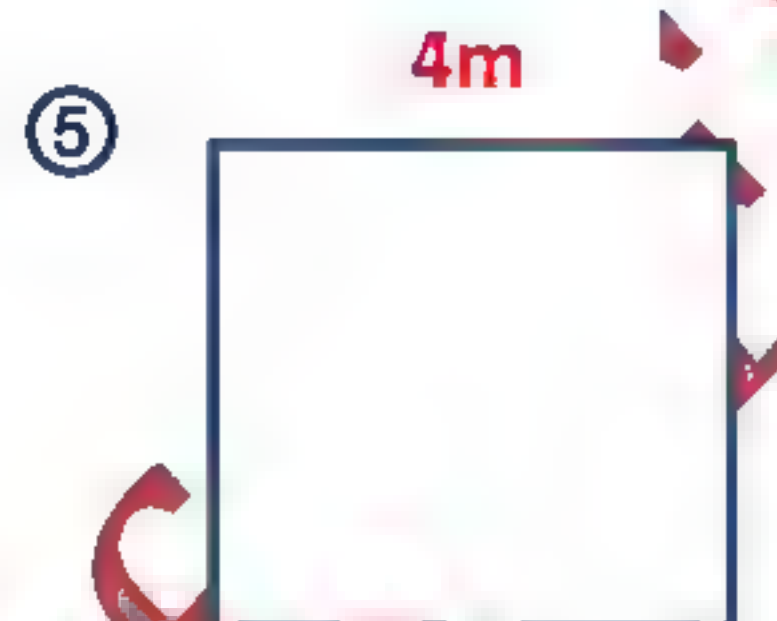
A = .....



A = .....



A = .....



A = .....



A = .....

**Ex② :** Answer the following.

① A glass company is cutting a piece of glass to cover the top of a banquet table. The table measures 8 meters by 6 meters. What is the area of the glass needed for the table?

.....

.....

② Andy is putting carpet in a room that measures 4 m by 5 m. How many square meters of carpet does he need?

.....

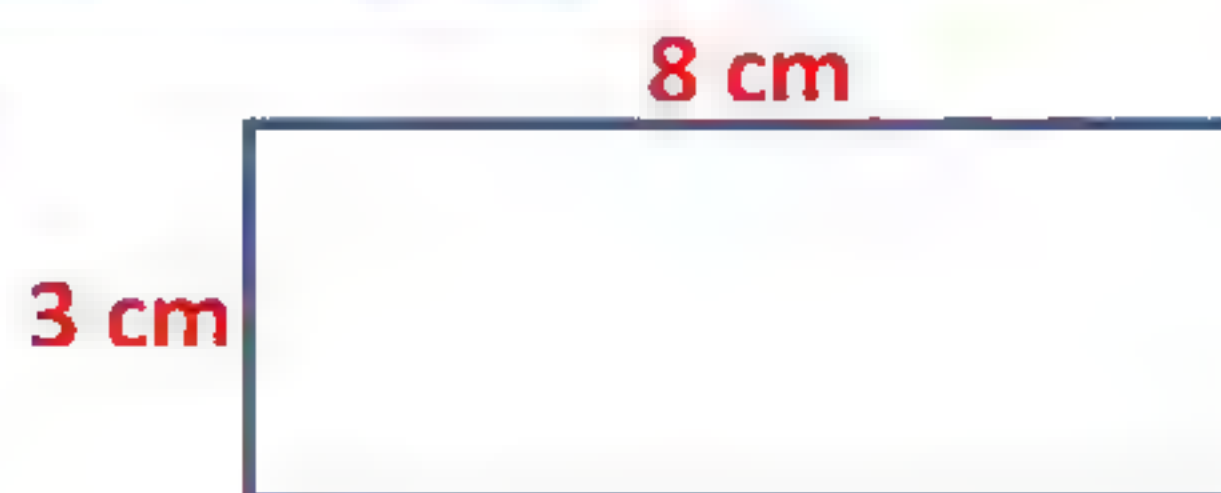
.....





**Exercise ①**Find the perimeter and the area of the following :

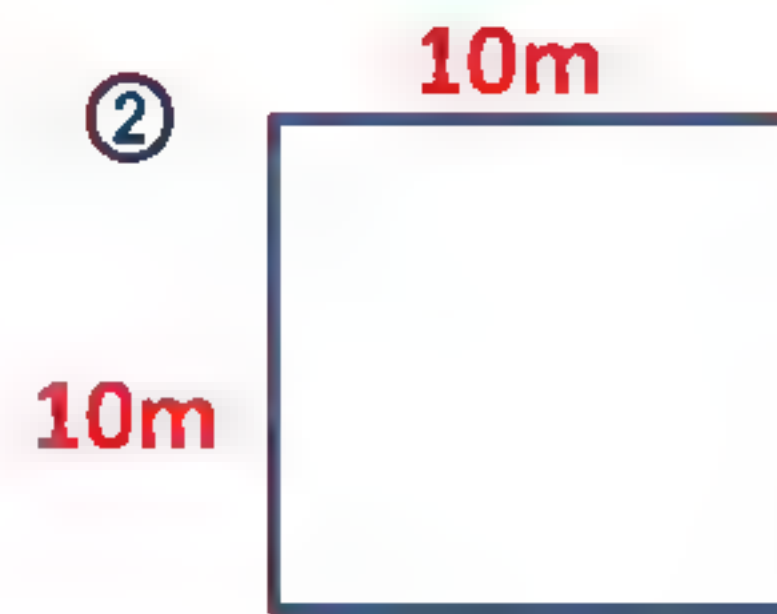
①



P = .....

A = .....

②



P = .....

A = .....

③



P = .....

A = .....

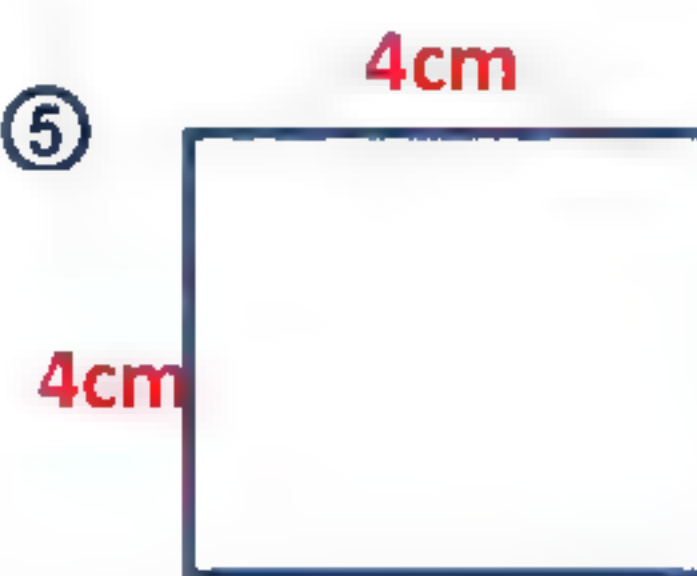
④



P = .....

A = .....

⑤



P = .....

A = .....

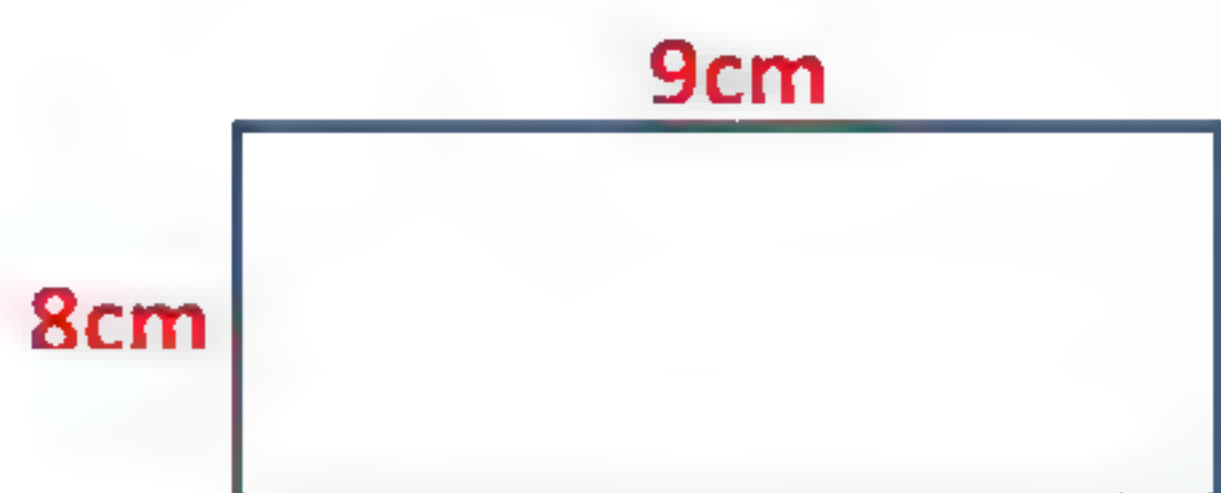
⑥



P = .....

A = .....

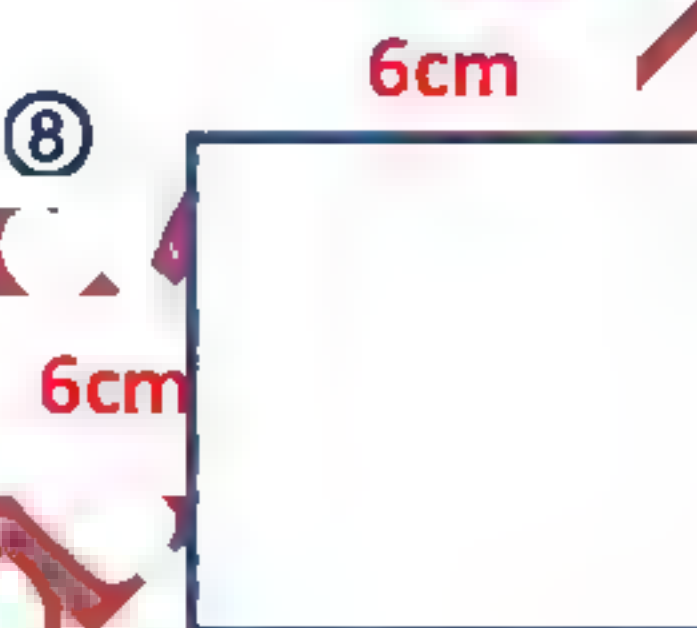
⑦



P = .....

A = .....

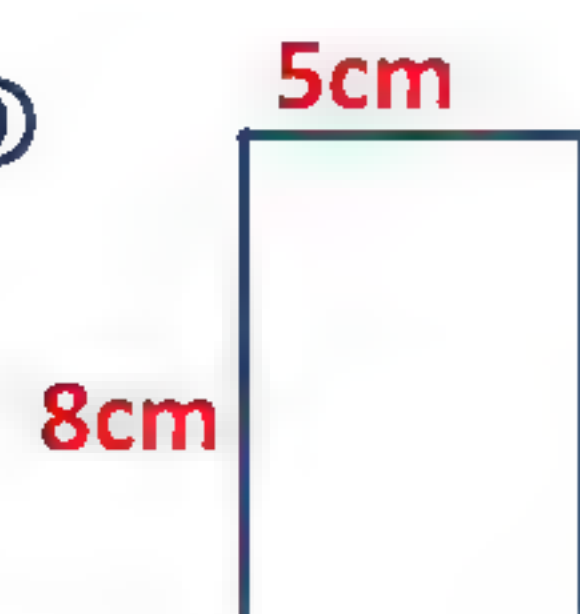
⑧



P = .....

A = .....

⑨



P = .....

A = .....

**Exercise ②**Complete the following :

- ① The area of a rectangle its dimensions are 5 cm and 3 cm is .....
- ② A rectangle its width is 4 cm and its length is 6 cm, then its area is .....
- ③ The length of a rectangle is 10 mm and the width is 8 mm, then the area equals .....
- ④ A square whose side length is 4 meters, then its area is .....
- ⑤ A side length of a square is 10 cm, its area is .....
- ⑥ A square of side length 9 cm, its area is .....



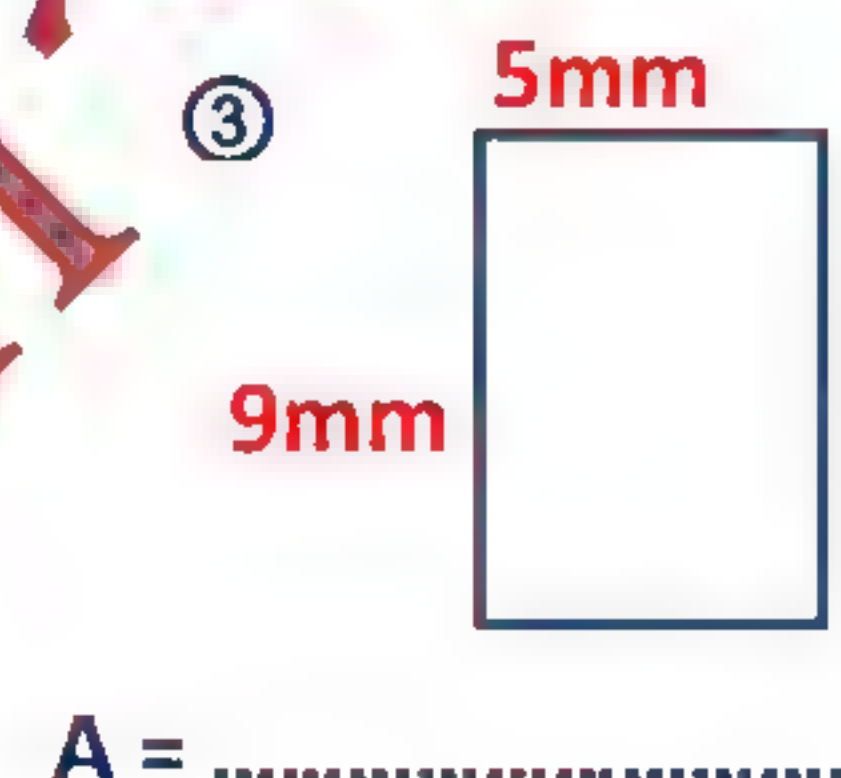
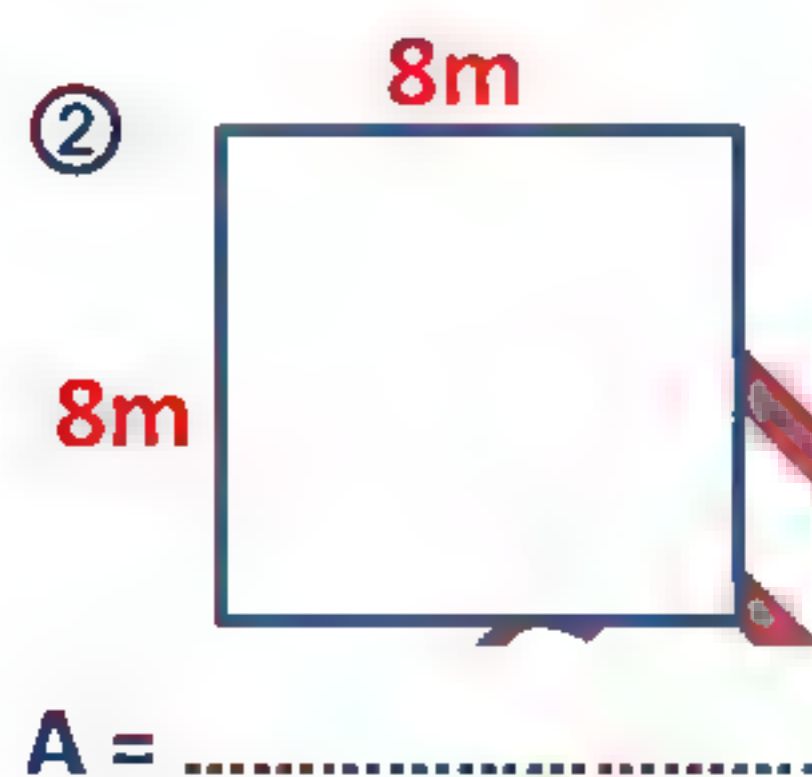
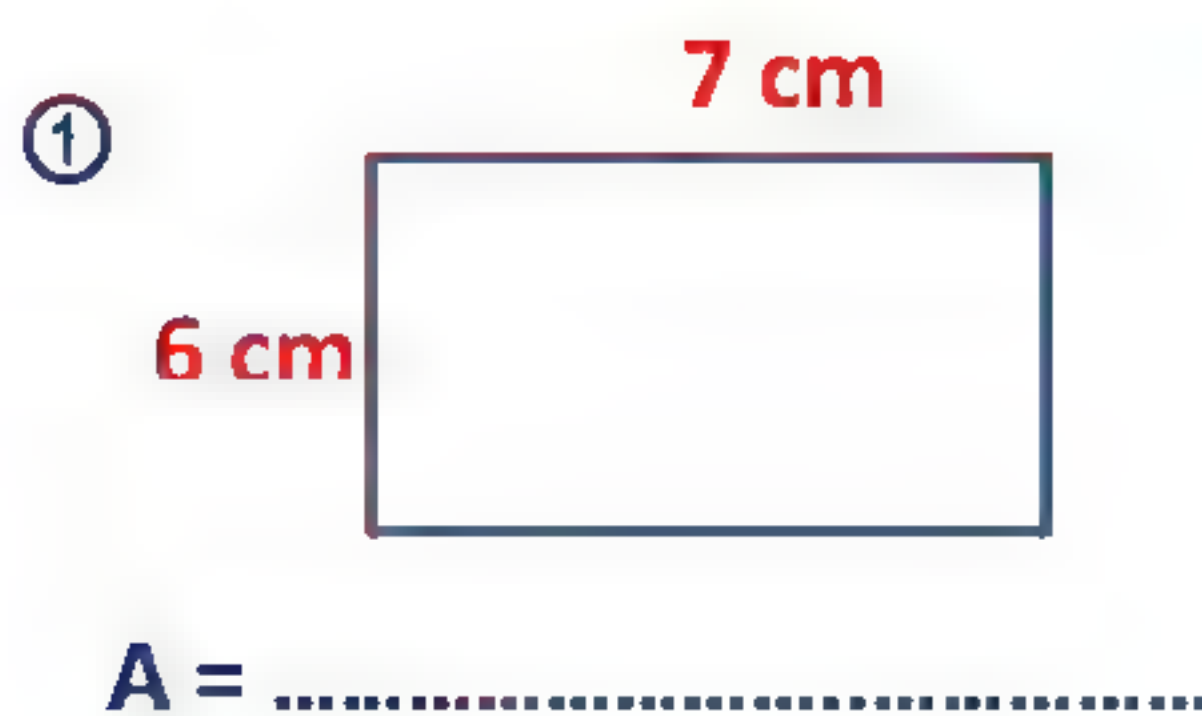


## Home Work

15

① Complete the following :

- ① A rectangle of 7 m length and 5 m width, its area is .....
- ② A rectangle is 8 m long and 5 m width, its area is .....
- ③ The area of a rectangle of 15 mm length and 5 mm width is .....
- ④ A square of side length 10 cm, its area is .....
- ⑤ The area of a square of side length 6 m is .....

② Find the area of the following :③ Choose the correct answer :

- ① A rectangle its length is L and its width is W what is its area?  
 A.  $L + w$       B.  $L \times W$       C.  $2 \times [L + W]$       D.  $[2 \times L] + w$
- ② Which two choices show the formula for the area of a rectangle?  
 A.  $A = 2 \times (L + w)$       B.  $A = 4 \times L$       C.  $A = L \times W$       D.  $A = [2 \times L] \times [2 \times W]$
- ③ Which choice shows the formula for the area of a square?  
 A.  $A = 4 + S$       B.  $A = 4 \times S$       C.  $A = S \times S$       D.  $A = S + S$
- ④ The area of a rectangle with two dimensions 10 cm and 5 cm is .....  
 A. 15 cm      B. 30 cm      C. 50 cm      D. 45 cm
- ⑤ A square of side length 7 cm, its area = .....  
 A. 11 cm      B. 21 cm      C. 28 cm      D. 49 cm

④ Answer the following questions :

A small rectangular ant farm measures 20 centimeters by 8 centimeters. What is the area of the ant farm?

.....

.....



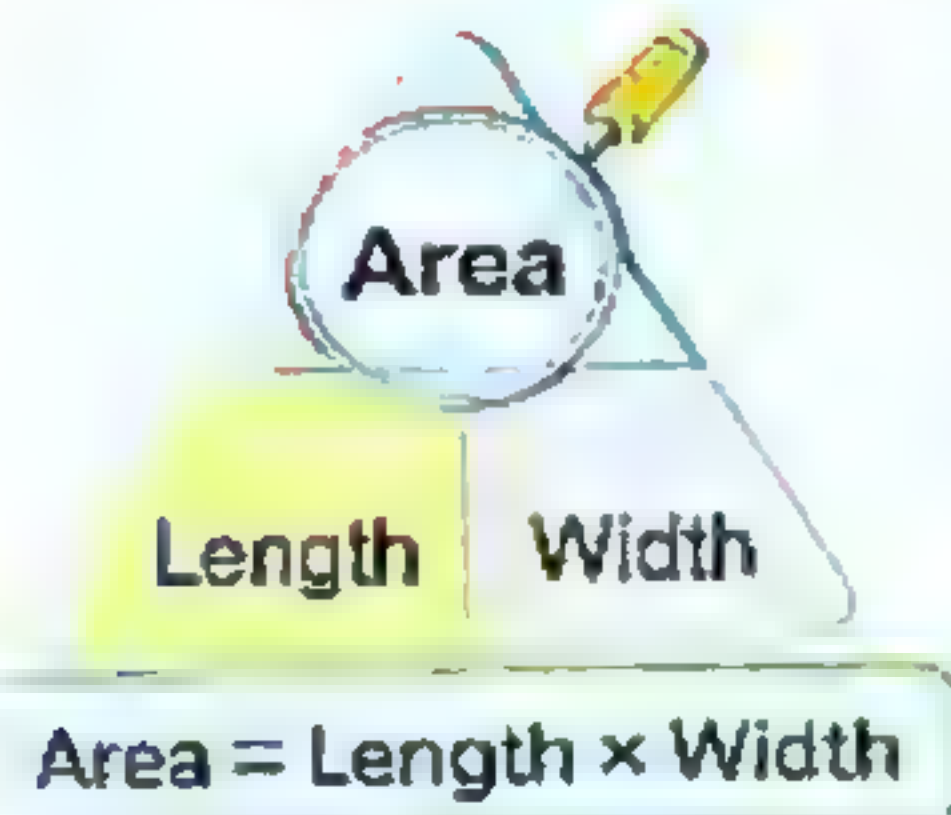


## lessons 3

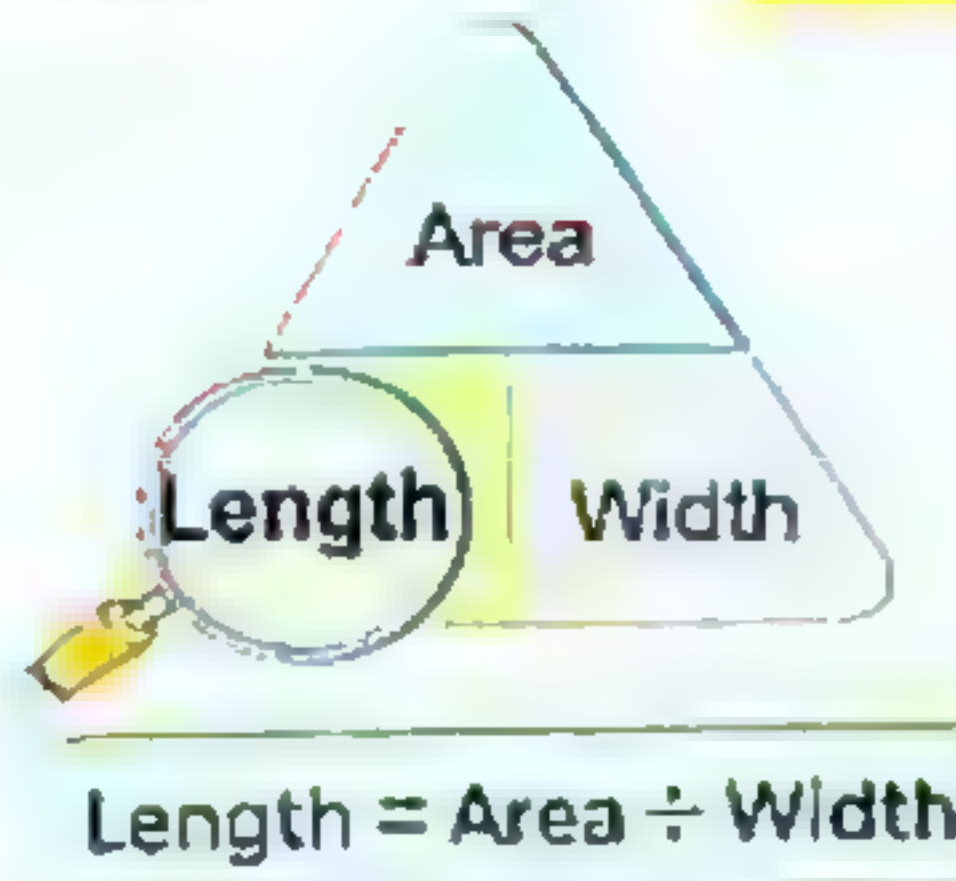
## Unknown Dimensions

Area of rectangle = length x width

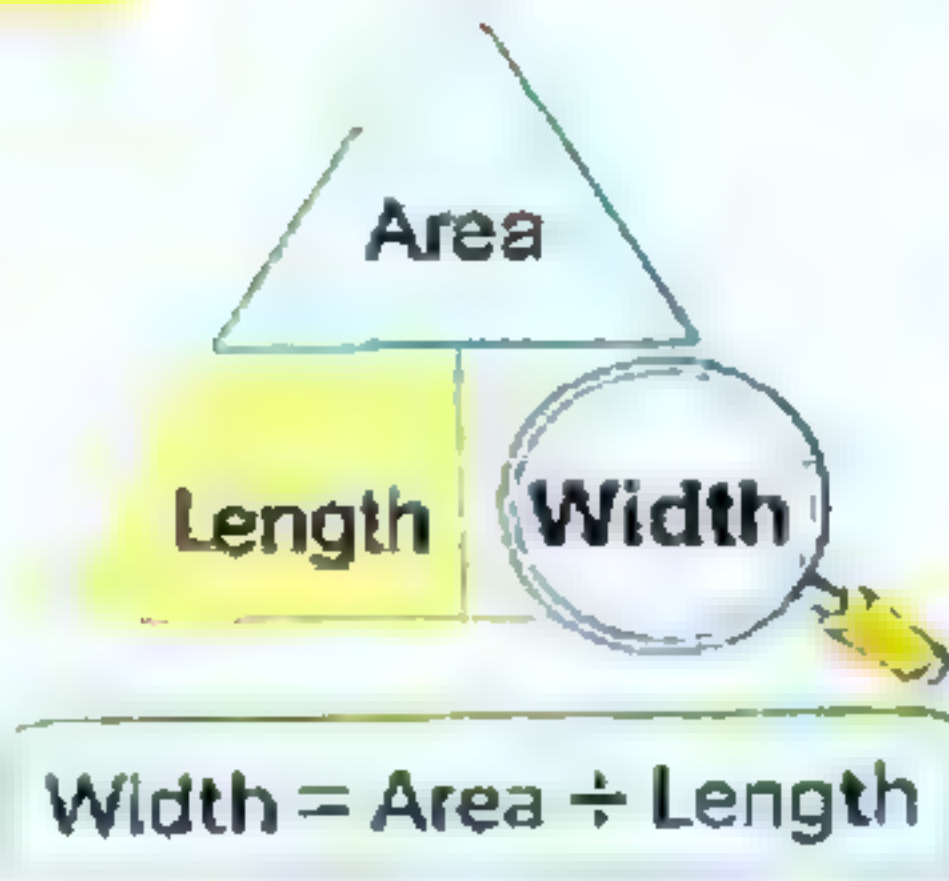
$$A = L \times W$$



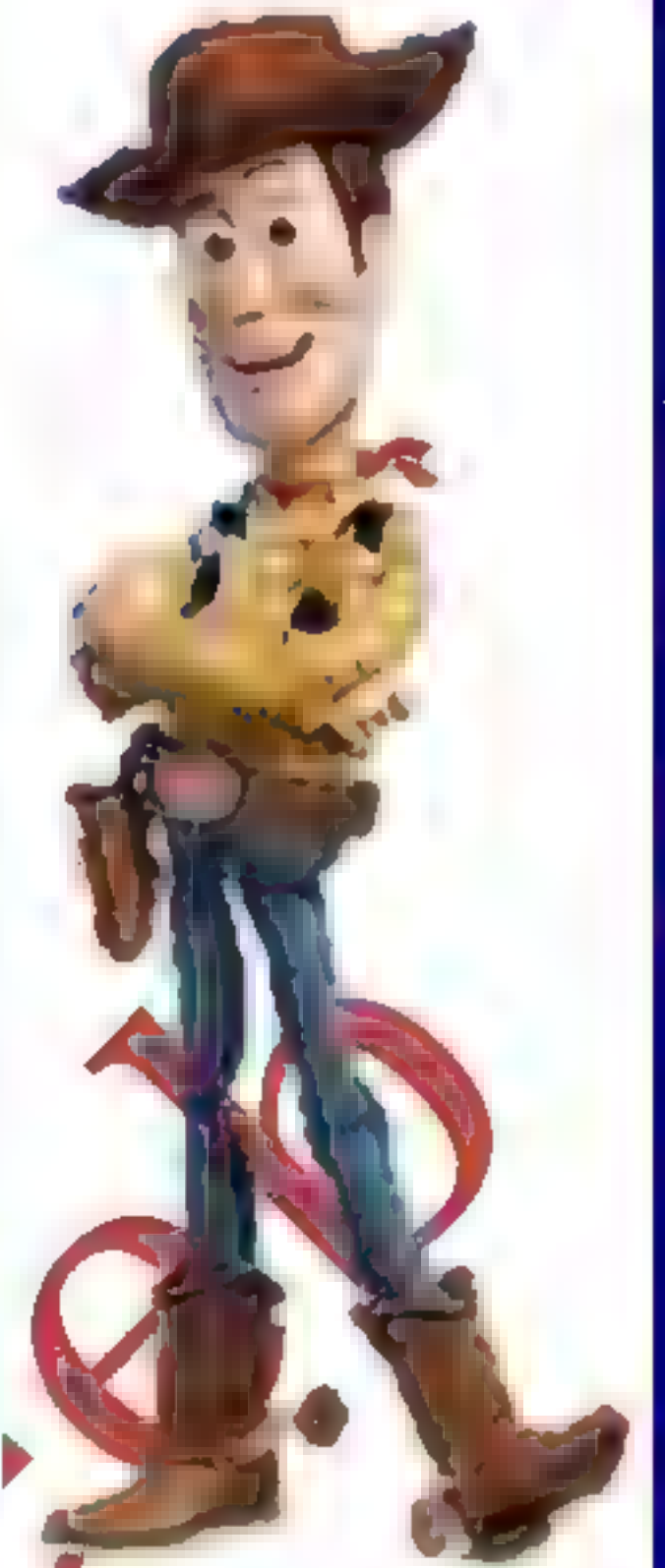
$$A = L \times W$$



$$L = A \div W$$



$$W = A \div L$$

**Ex①** : Find the unknown side ( x ) in each of the following:

①  $6\text{cm}$   
 $x$  Area =  $18\text{cm}^2$   
 $X = \dots\dots\dots$

②  $7\text{cm}$   
 $x$  Area =  $28\text{cm}^2$   
 $X = \dots\dots\dots$

③  $9\text{m}$   
 $x$  Area =  $45\text{m}^2$   
 $X = \dots\dots\dots$

④  $x$   
 $5\text{cm}$  Area =  $35\text{cm}^2$   
 $X = \dots\dots\dots$

⑤  $x$   
 $3\text{cm}$  Area =  $24\text{cm}^2$   
 $X = \dots\dots\dots$

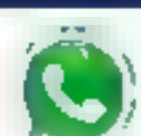
⑥  $x$   
 $6\text{m}$  Area =  $48\text{m}^2$   
 $X = \dots\dots\dots$

⑦ A rectangle of area  $24\text{cm}^2$  and its width is  $4\text{cm}$  , then its length equal .....⑧ if the area of a rectangle is  $42\text{cm}^2$  and its length  $7\text{cm}$  , then its width = .....⑨ A rectangle of width is  $6\text{cm}$  and its area  $60\text{cm}^2$  , then its length equal .....⑩ A rectangle of area  $72\text{cm}^2$  and its length is  $9\text{cm}$  , then its width equal .....**Exercise ①**

①  $8\text{cm}$   
 $x$  Area =  $32\text{cm}^2$   
 $X = \dots\dots\dots$

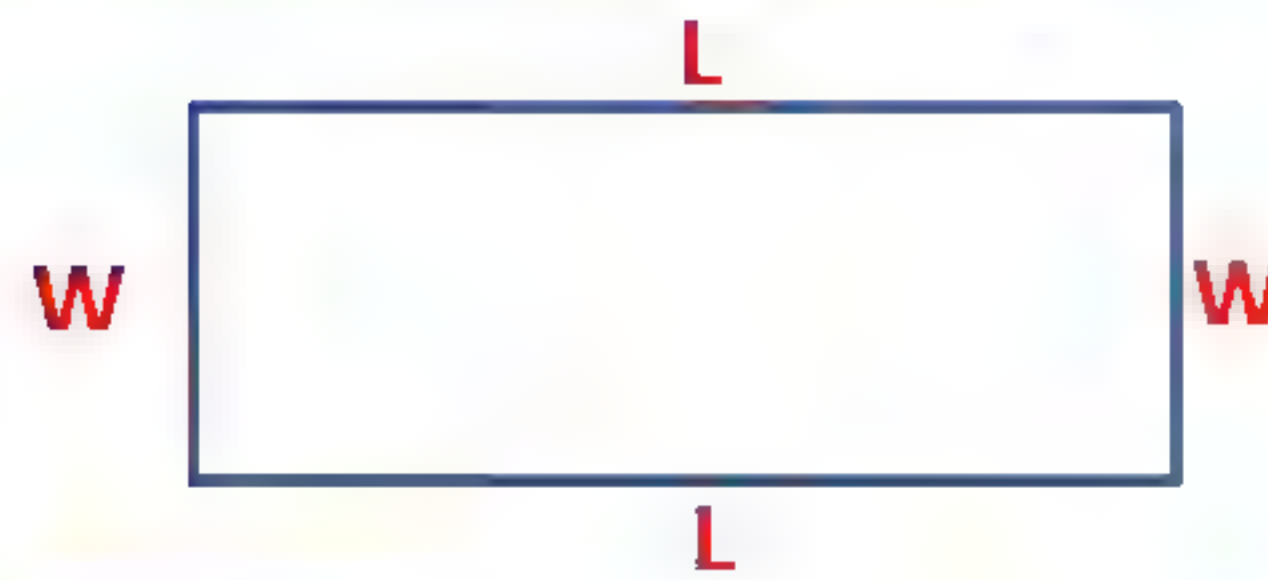
②  $7\text{cm}$   
 $x$  Area =  $42\text{cm}^2$   
 $X = \dots\dots\dots$

③  $8\text{m}$   
 $x$  Area =  $56\text{m}^2$   
 $X = \dots\dots\dots$





## Perimeter of a rectangle



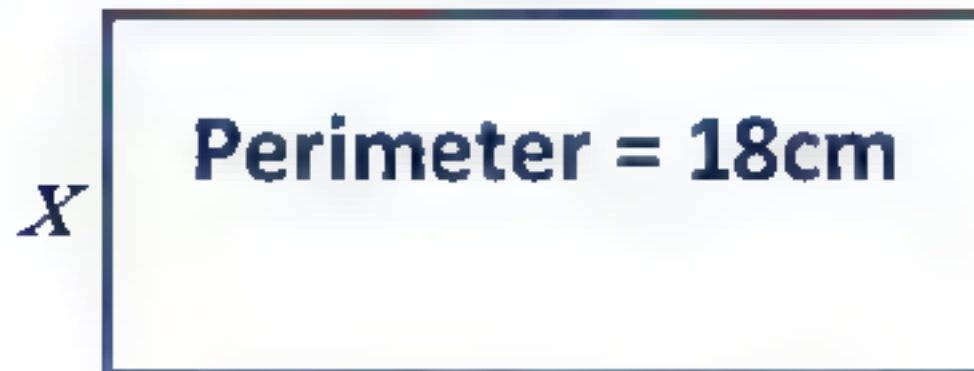
$$P = 2 \times [L + W]$$

$$L = \frac{1}{2} P - W$$

$$W = \frac{1}{2} P - L$$

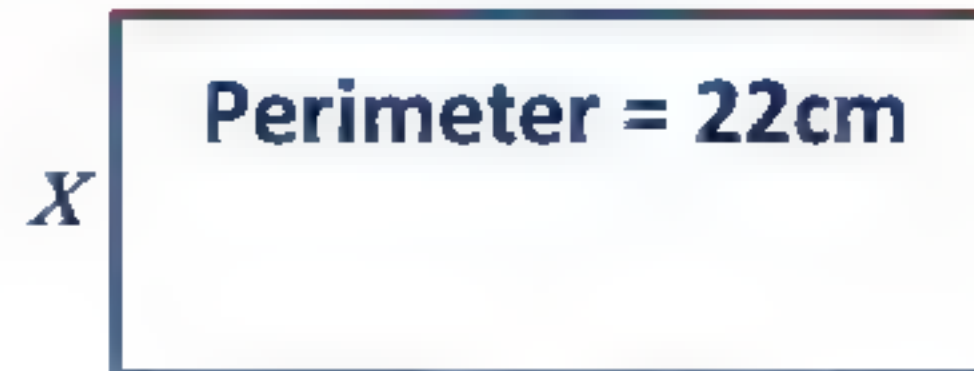
**Ex①** : Find the unknown side ( x ) in each of the following :

① 6cm



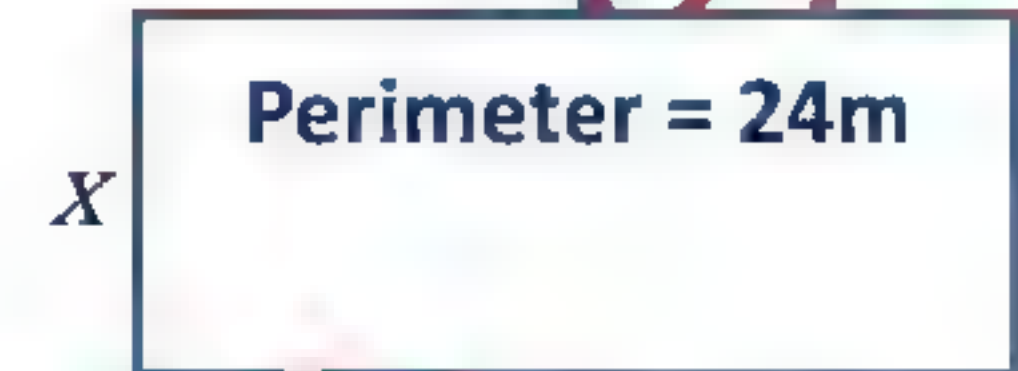
X = .....

② 7cm



X = .....

③ 9m



X = .....

④ x



X = .....

⑤ x



X = .....

⑥ x



X = .....

⑦ A rectangle of perimeter 24 cm and its width is 4cm , then its length equal .....

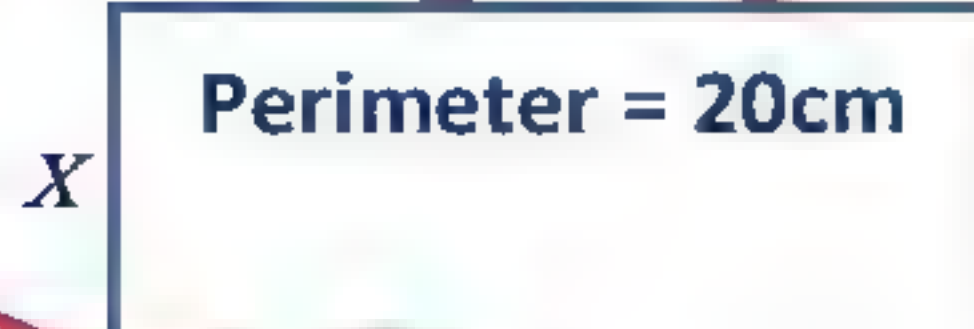
⑧ A rectangle of perimeter 18 cm and its length is 4cm , then its width equal .....

⑨ A rectangle of perimeter 20 cm and its length is 8cm , then its width equal .....

⑩ A rectangle of perimeter 30 cm and its width is 6cm , then its length equal .....

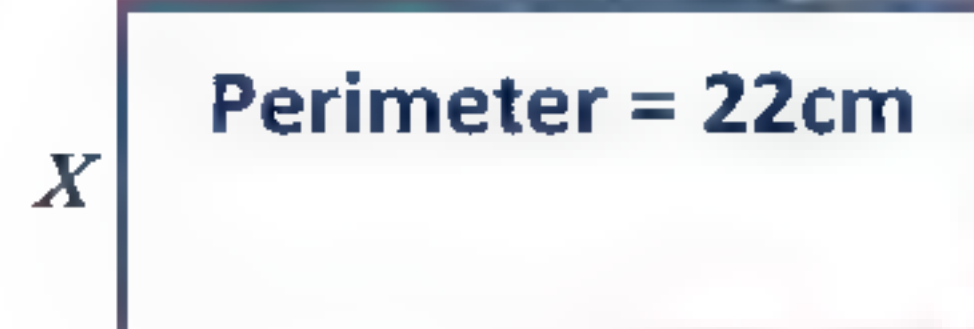
## Exercise ①

① 8cm



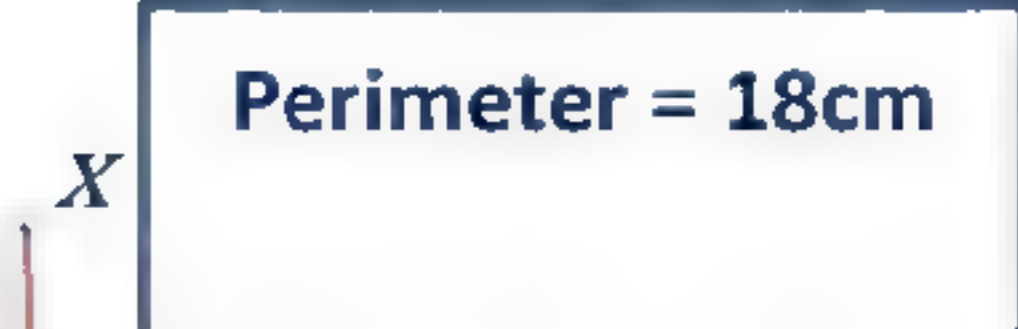
X = .....

② 7cm



X = .....

③ 8m



X = .....

④ A rectangle of perimeter 20 cm and its width is 4cm , then its length equal .....

⑤ A rectangle of perimeter 18 cm and its length is 8cm , then its width equal .....





## Area of a square

$$A = S \times S$$

$S =$  the number that  
multiply by itself = area

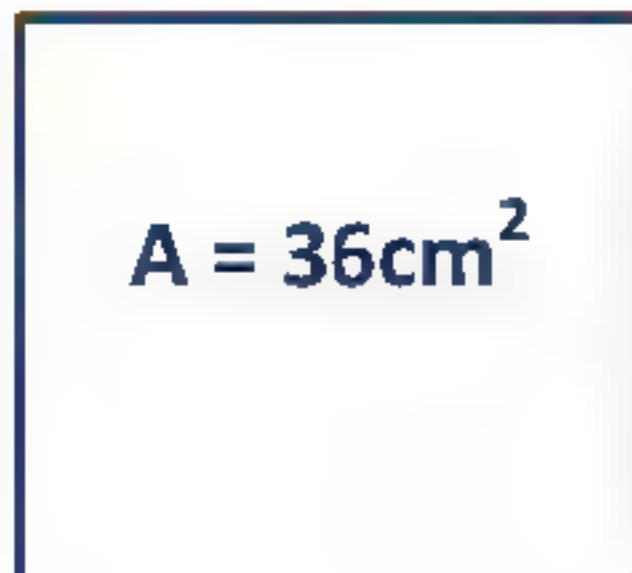
## Perimeter of a square

$$P = 4 \times S$$

$$S = P \div 4$$

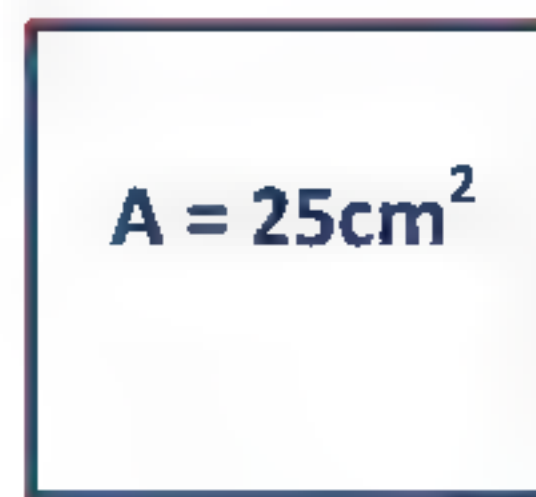
**Ex①** : Find the side length of the following squares :

①



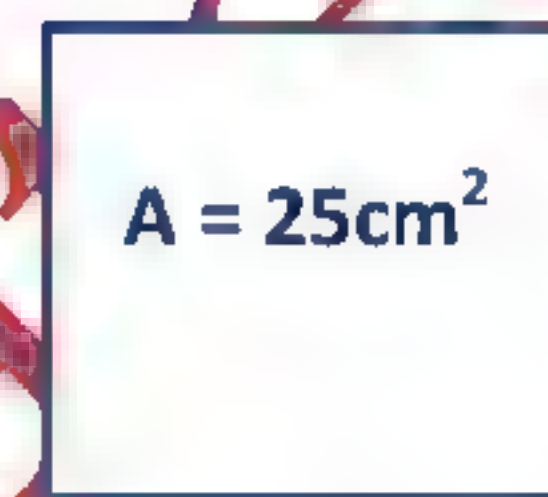
$S =$  .....

②



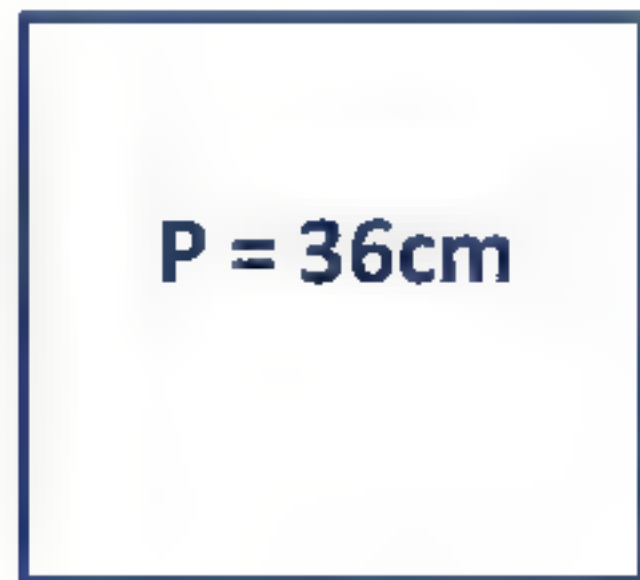
$S =$  .....

③



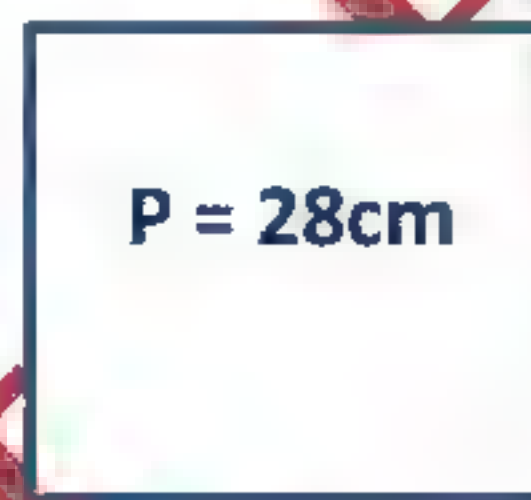
$S =$  .....

④



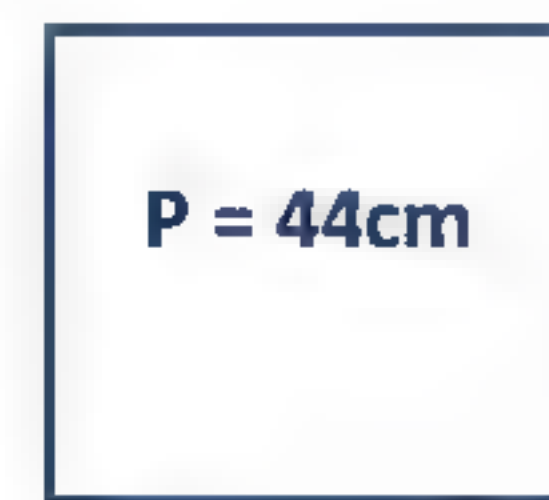
$S =$  .....

⑤



$S =$  .....

⑥



$S =$  .....

⑦ A square of area  $49\text{cm}^2$  , then its side length = .....

⑧ A square of perimeter  $24\text{cm}$  , then its side length = .....

⑨ A square of area  $81\text{m}^2$  , then its side length = .....

⑩ A square of perimeter  $36\text{cm}$  , then its side length = .....

## Exercise ①

① A square of area  $49\text{cm}^2$  , then its side length = .....

② A square of perimeter  $24\text{cm}$  , then its side length = .....

③ A square of area  $81\text{m}^2$  , then its side length = .....

④ A square of perimeter  $36\text{cm}$  , then its side length = .....

⑤ A square has an area of 36 square centimeters, then its perimeter is .....





## Home Work

15

① Complete the following :

- ① A square is of area  $49 \text{ km}^2$ , then its side length is .....
- ② The perimeter of a square is 36 cm, then the length of its side is .....
- ③ A square has a perimeter 12 cm, then its area is .....
- ④ A square has an area of 16 square centimeters, then its perimeter is .....
- ⑤ The area of a rectangle is  $42 \text{ km}^2$ , and its width is 6 km, then its length is .....
- ⑥ The area of a rectangle is  $45 \text{ m}^2$ , and its length is 9 m, then its perimeter is .....
- ⑦ If the perimeter of a rectangle is 26 cm, and its width is 4 cm, then its length is .....
- ⑧ A rectangle has perimeter 32 m, and its length is 9 m, then its area is .....

② Choose the correct answer :

- ① A rectangle of area  $32 \text{ cm}^2$  and its length is 8 cm, then its width = .....  
 A. 4                      B. 8                      C. 18                      D. 256
- ② A square of area  $100 \text{ cm}^2$ , then its side length = .....  
 A. 4                      B. 6                      C. 8                      D. 10
- ③ Which choice shows the formula for the side length of a square?  
 A.  $S=4+ A$               B.  $S= P \times 4$               C.  $S=A \times P$               D.  $S=P \div 4$
- ④ A rectangle of perimeter 27 cm and its width is 3 cm, then its length = .....  
 A. 15 cm              B. 9 cm              C. 5 cm              D. 81 cm
- ⑤ A square of a perimeter 48 cm, its side length = .....  
 A. 11 cm              B. 12 cm              C. 28 cm              D. 44 cm

④ Answer the following questions :

A rectangular flowerbed in the city park has an area of 12 square meters. The width of the flowerbed is 3 meters. What is the length of the flowerbed?

.....

.....



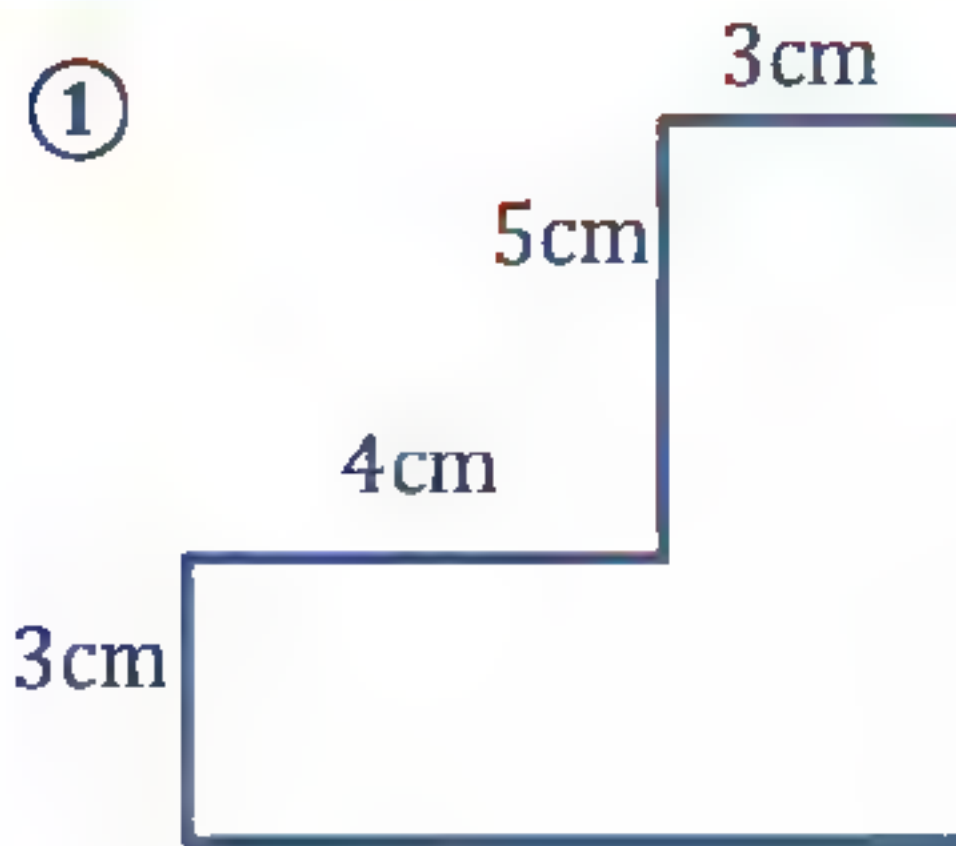


## lessons 4

## Complexed figures

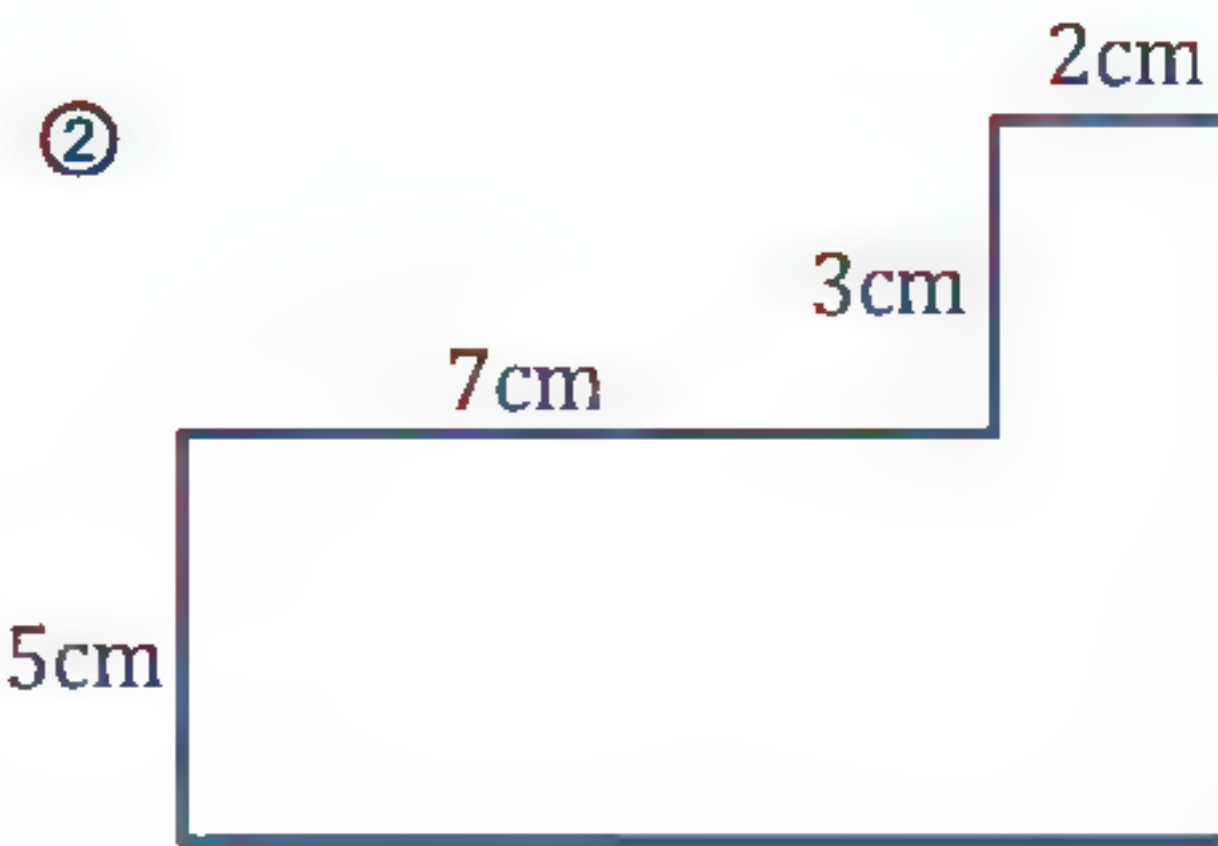


**Ex①** : Find the perimeter and the area of the following :



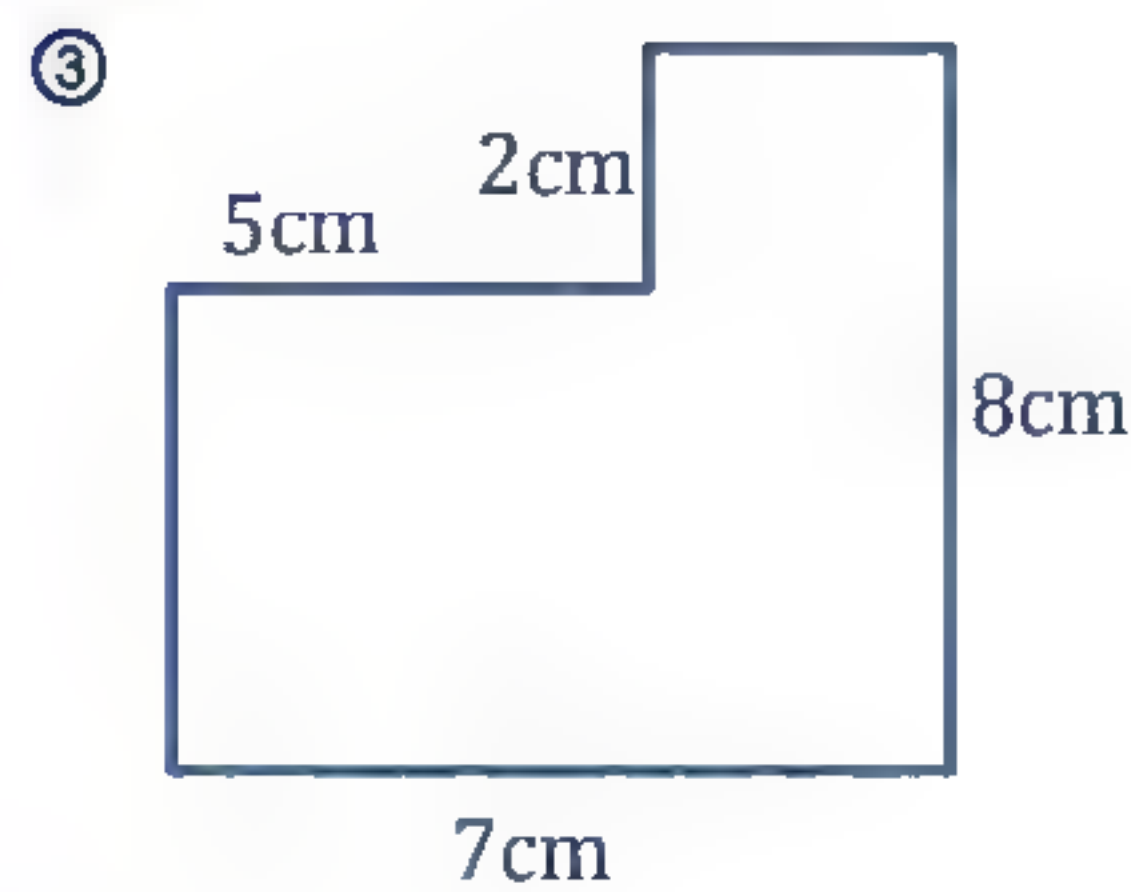
P = .....

A = .....



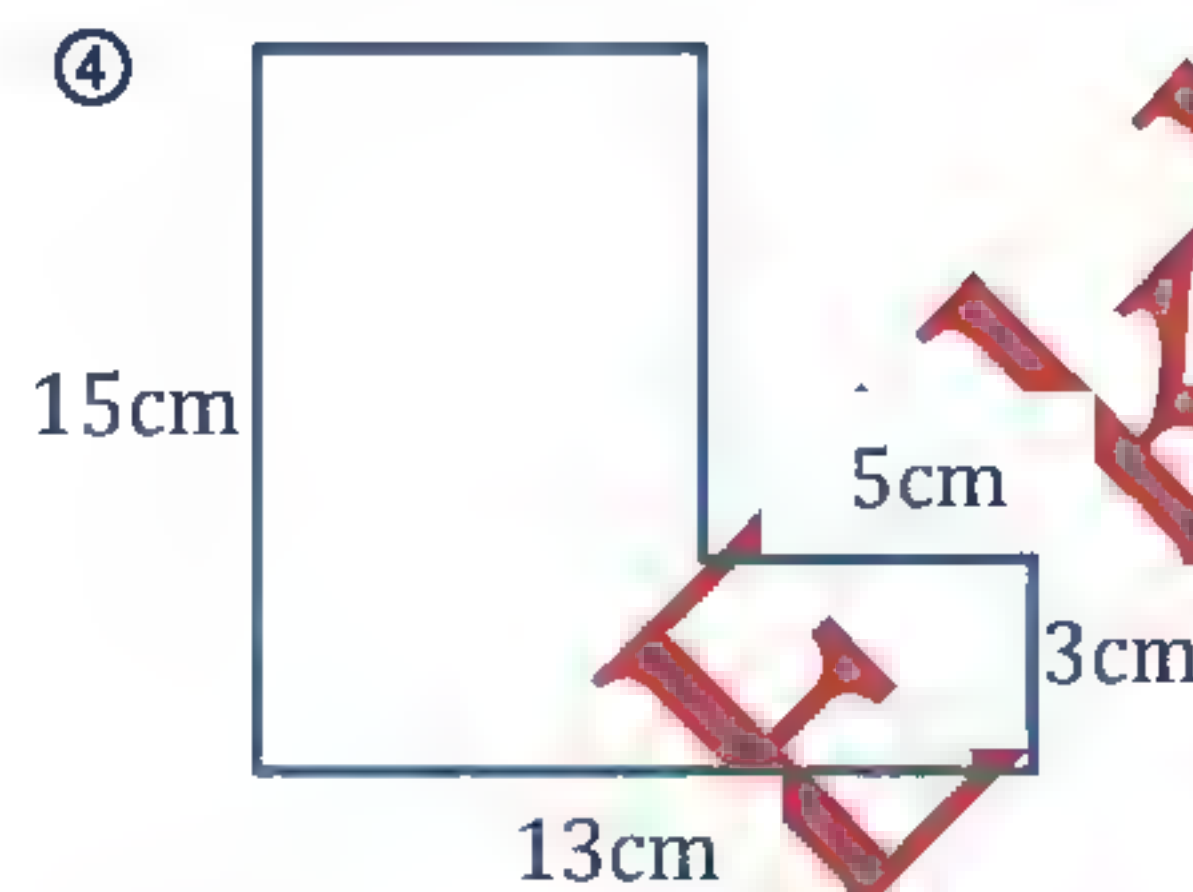
P = .....

A = .....



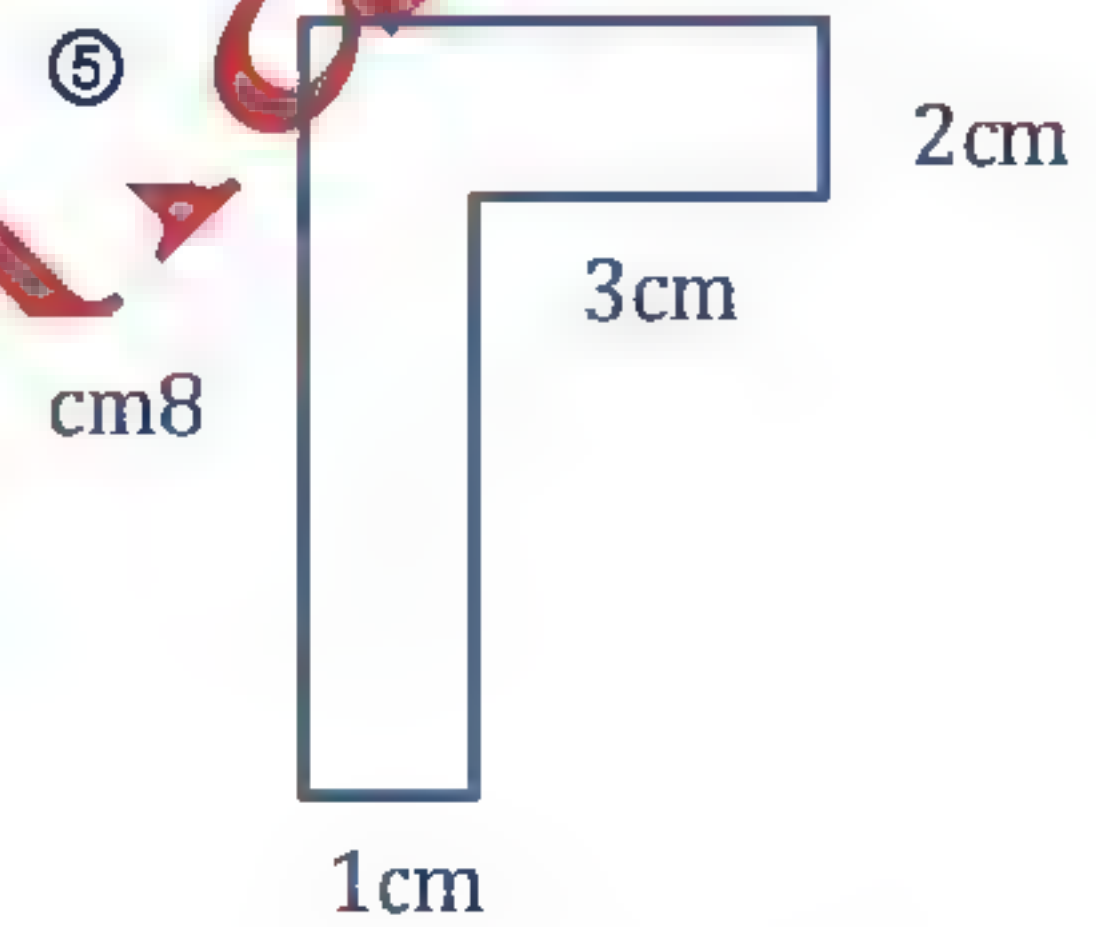
P = .....

A = .....



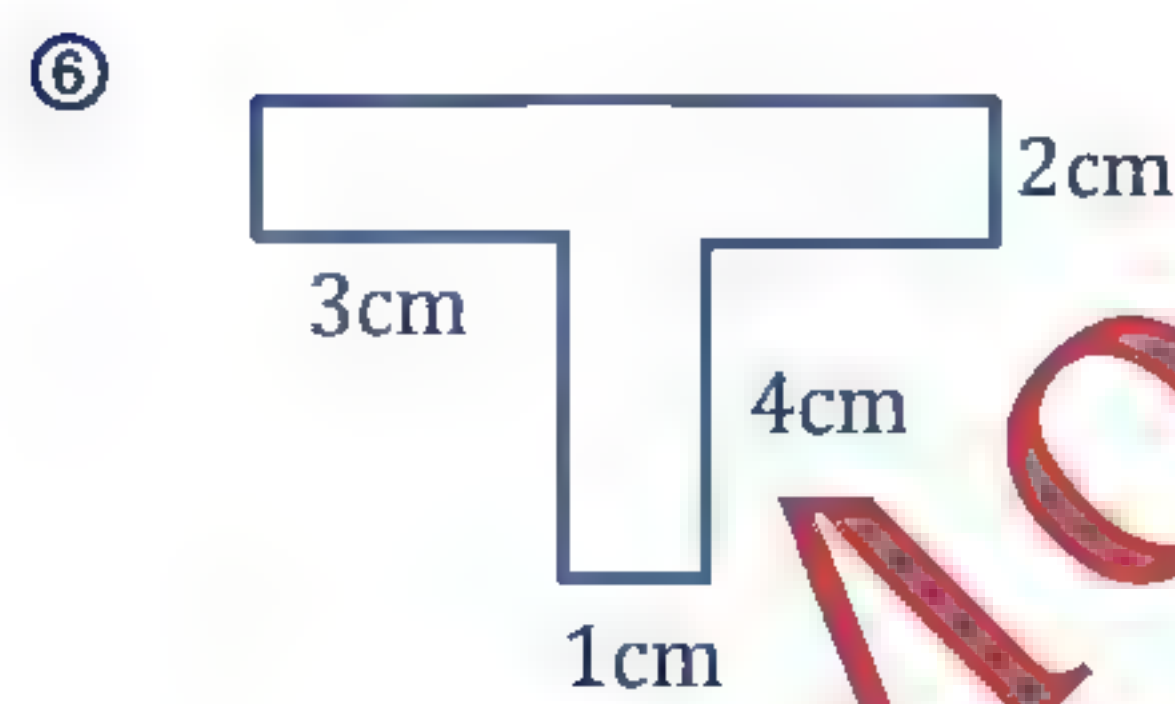
P = .....

A = .....



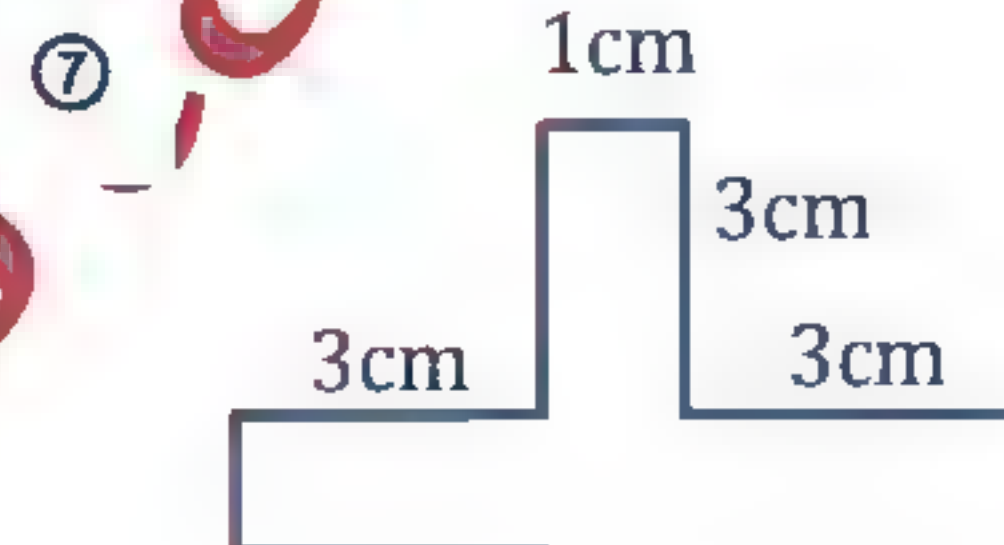
P = .....

A = .....



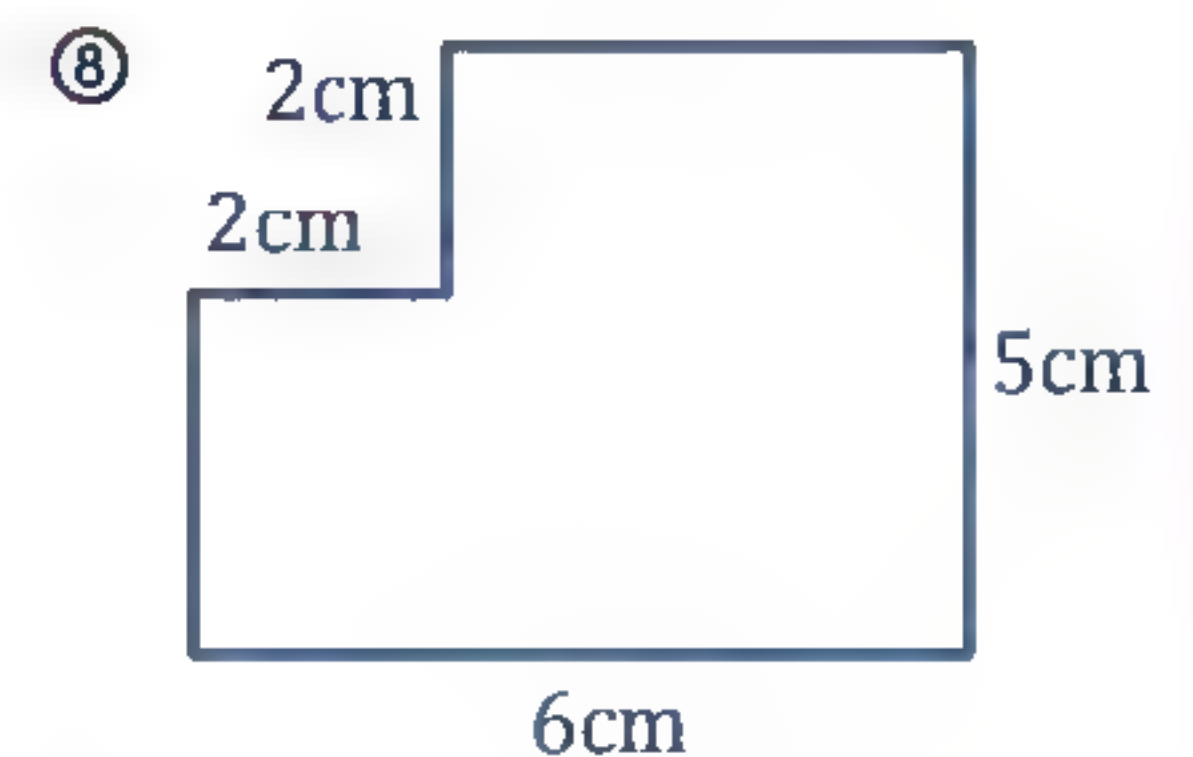
P = .....

A = .....



P = .....

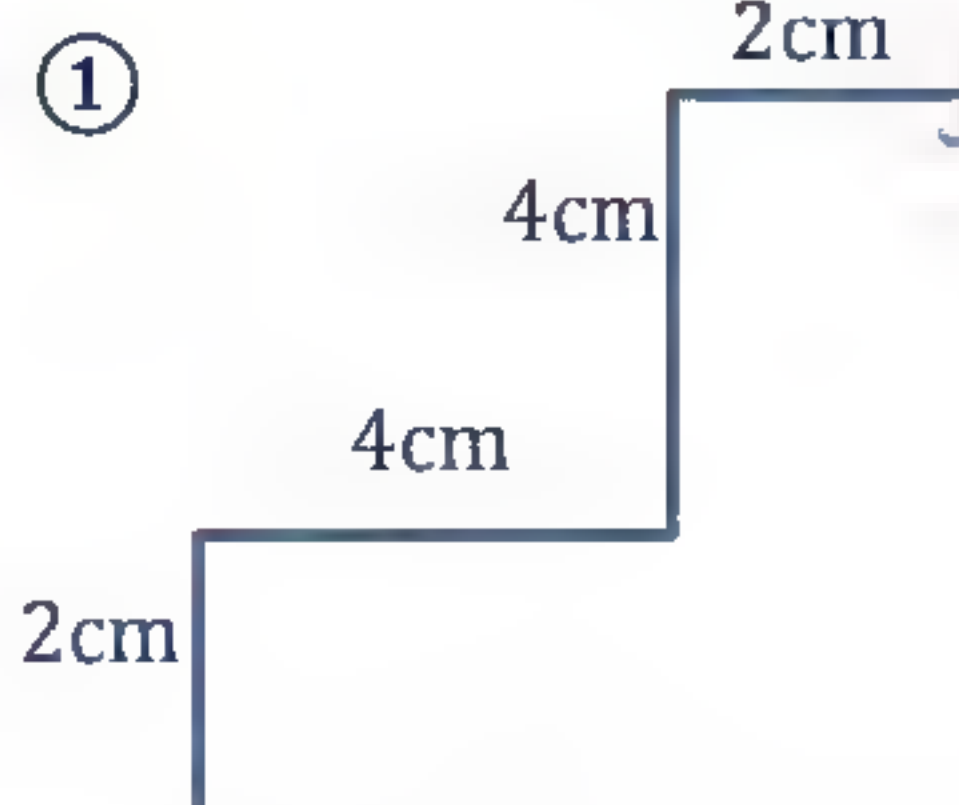
A = .....



P = .....

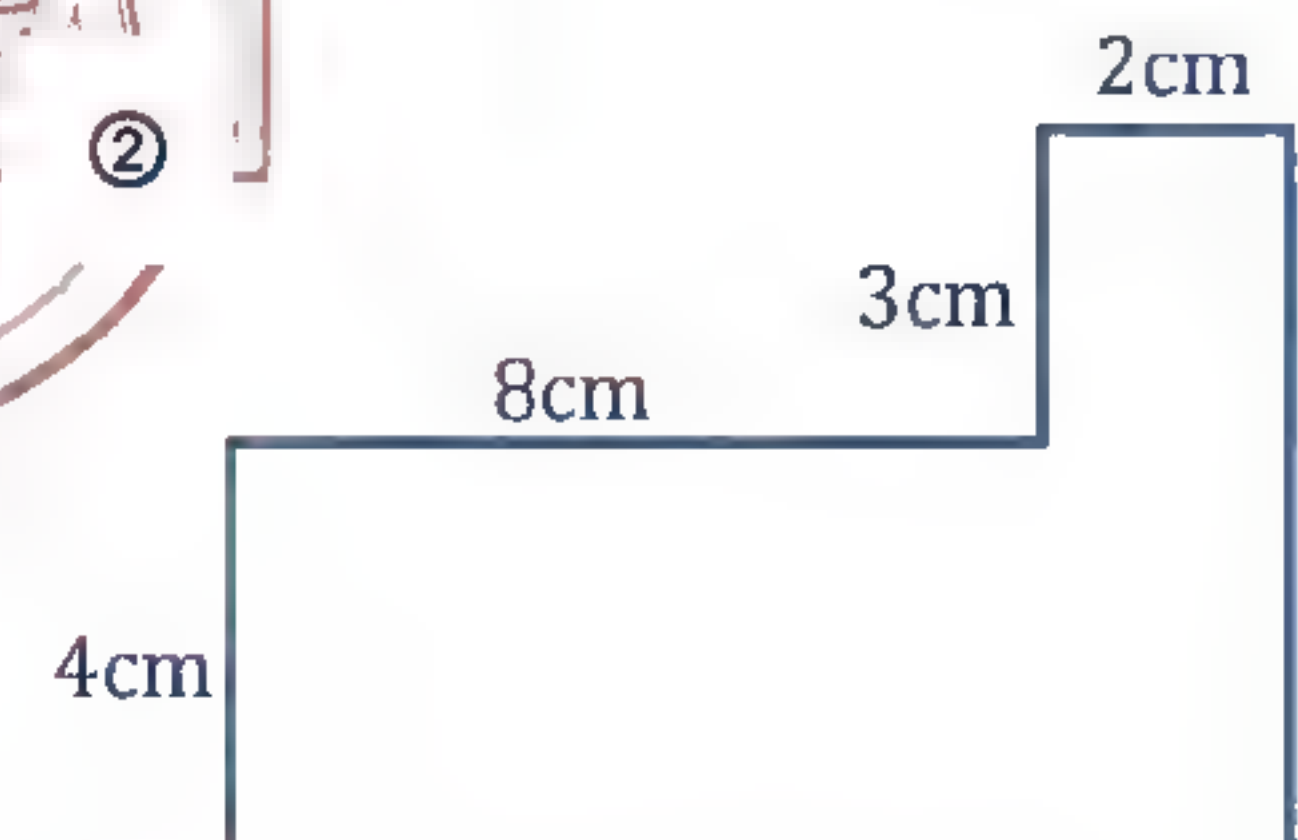
A = .....

## Exercise ①



P = .....

A = .....



P = .....

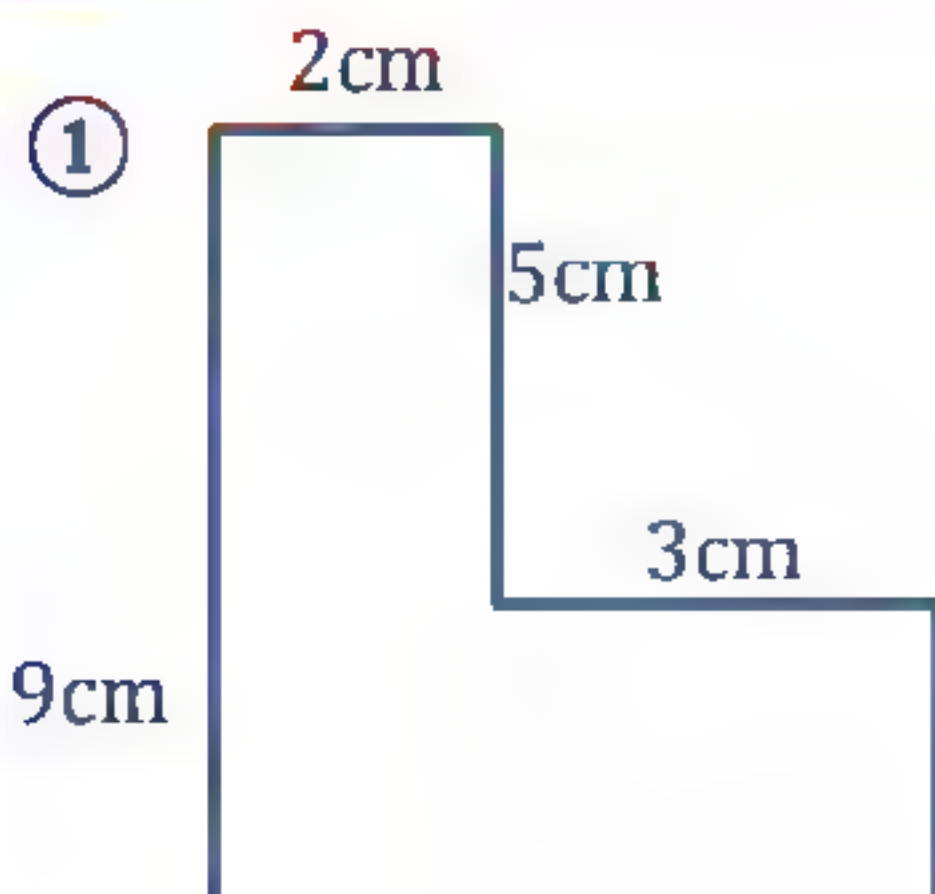
A = .....





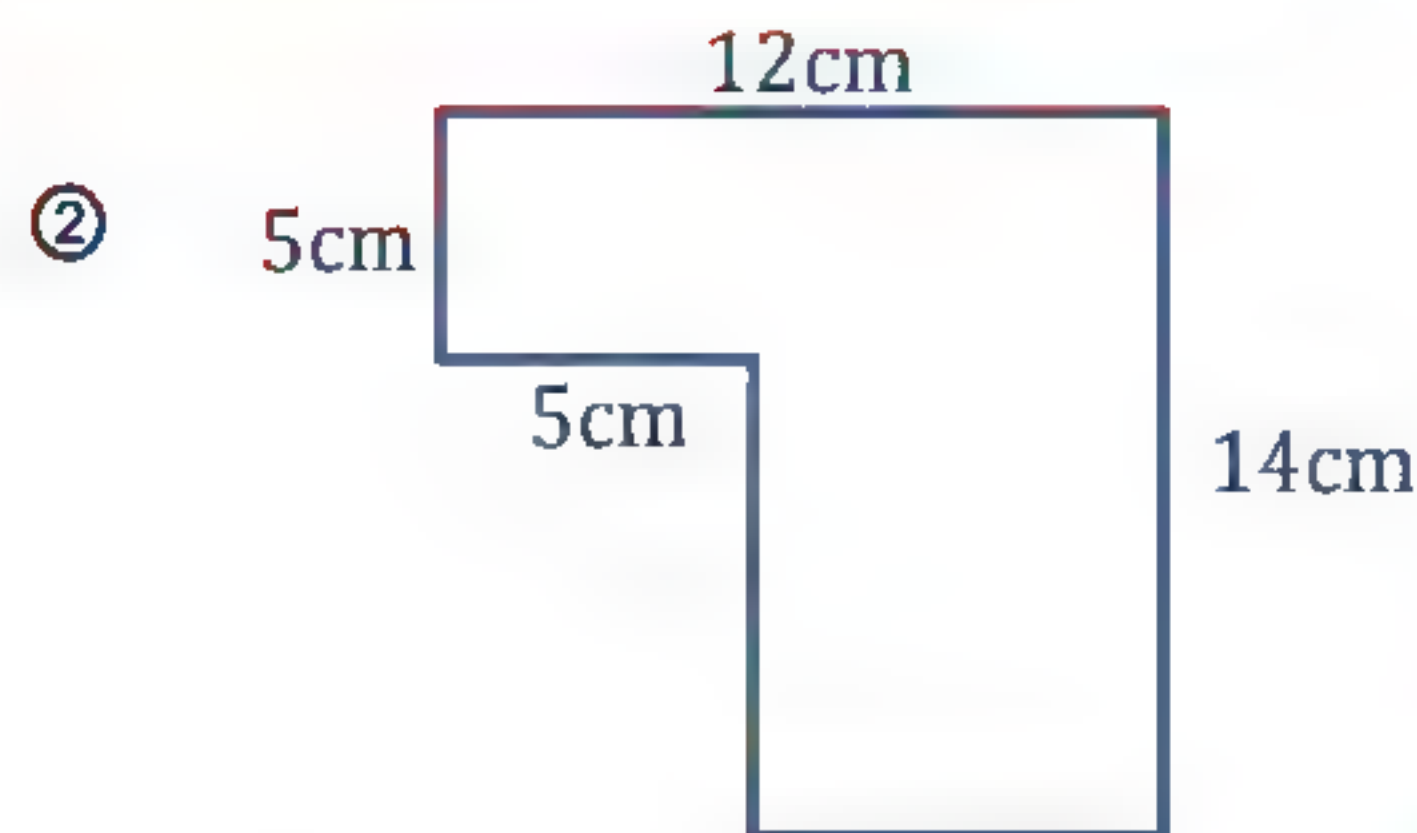
## Home Work

15

**Ex①** : Find the perimeter and the area of the following :

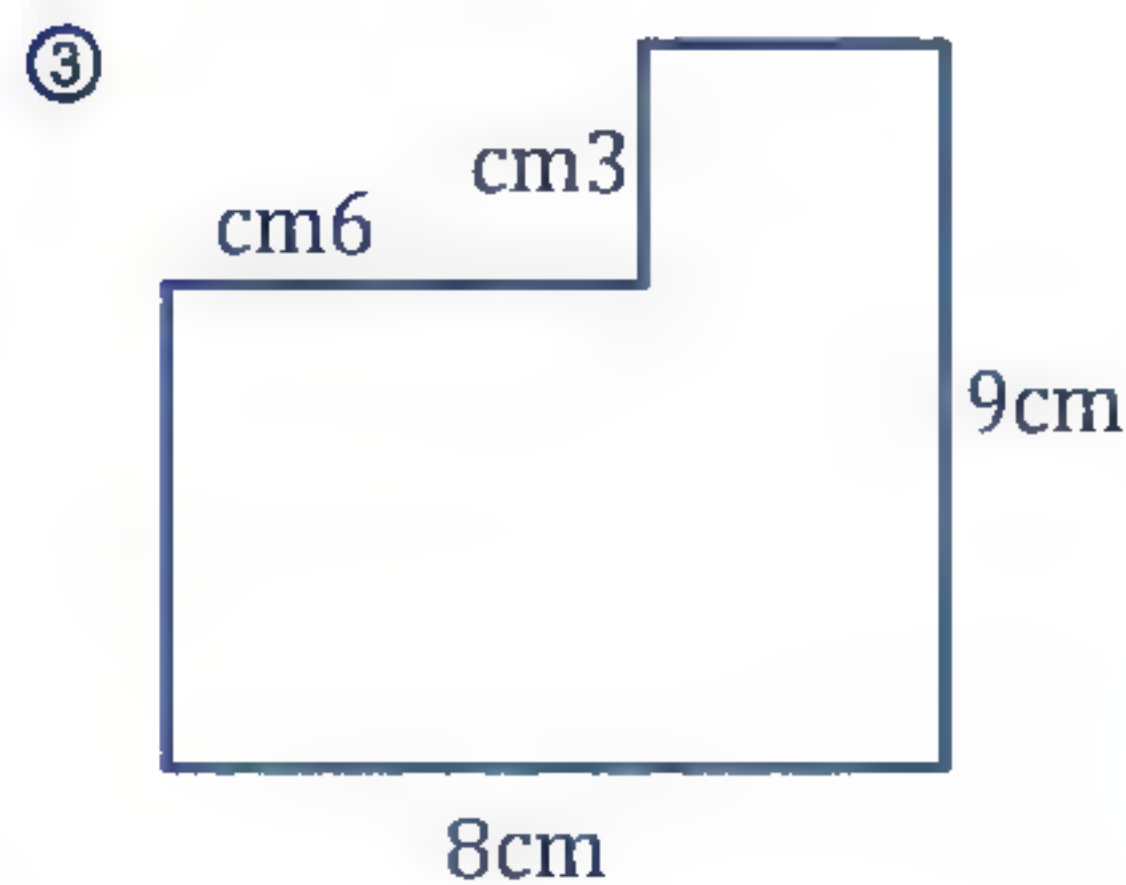
P = .....

A = .....



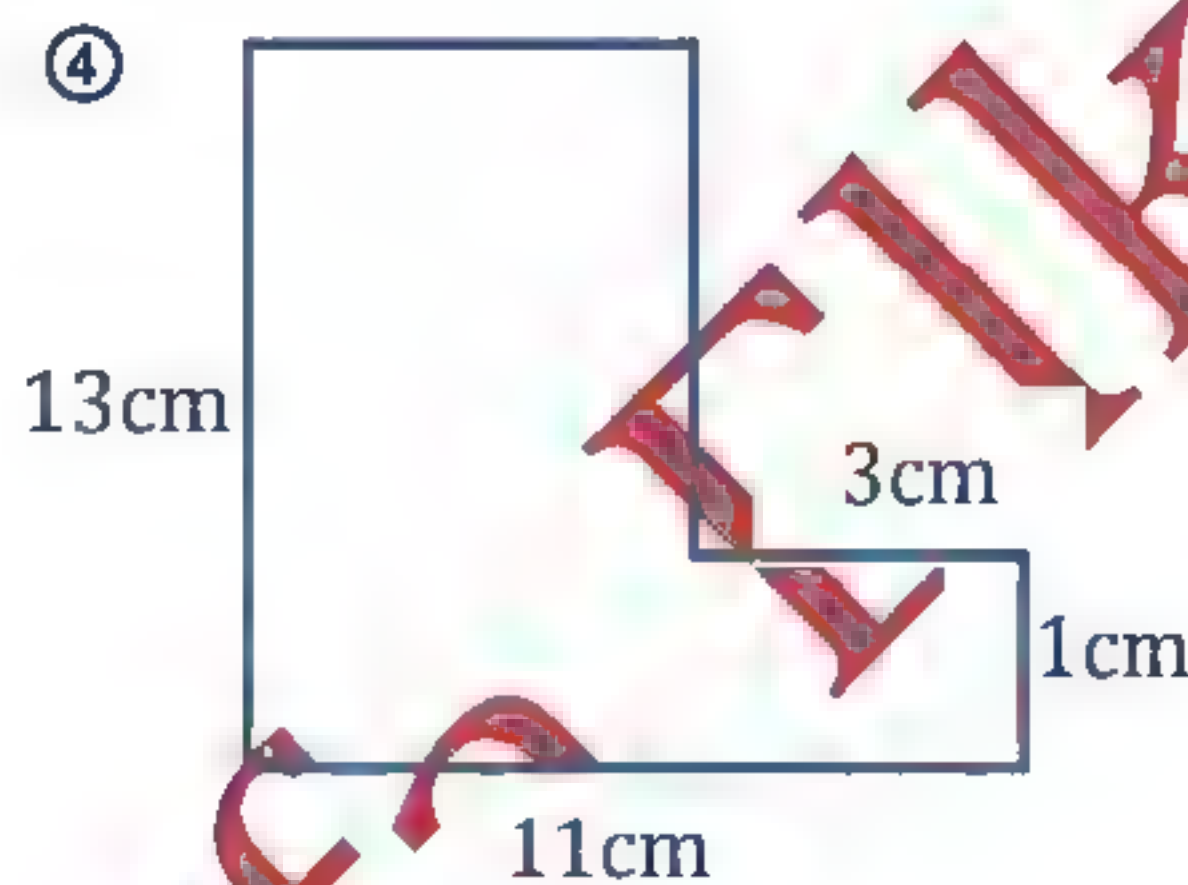
P = .....

A = .....



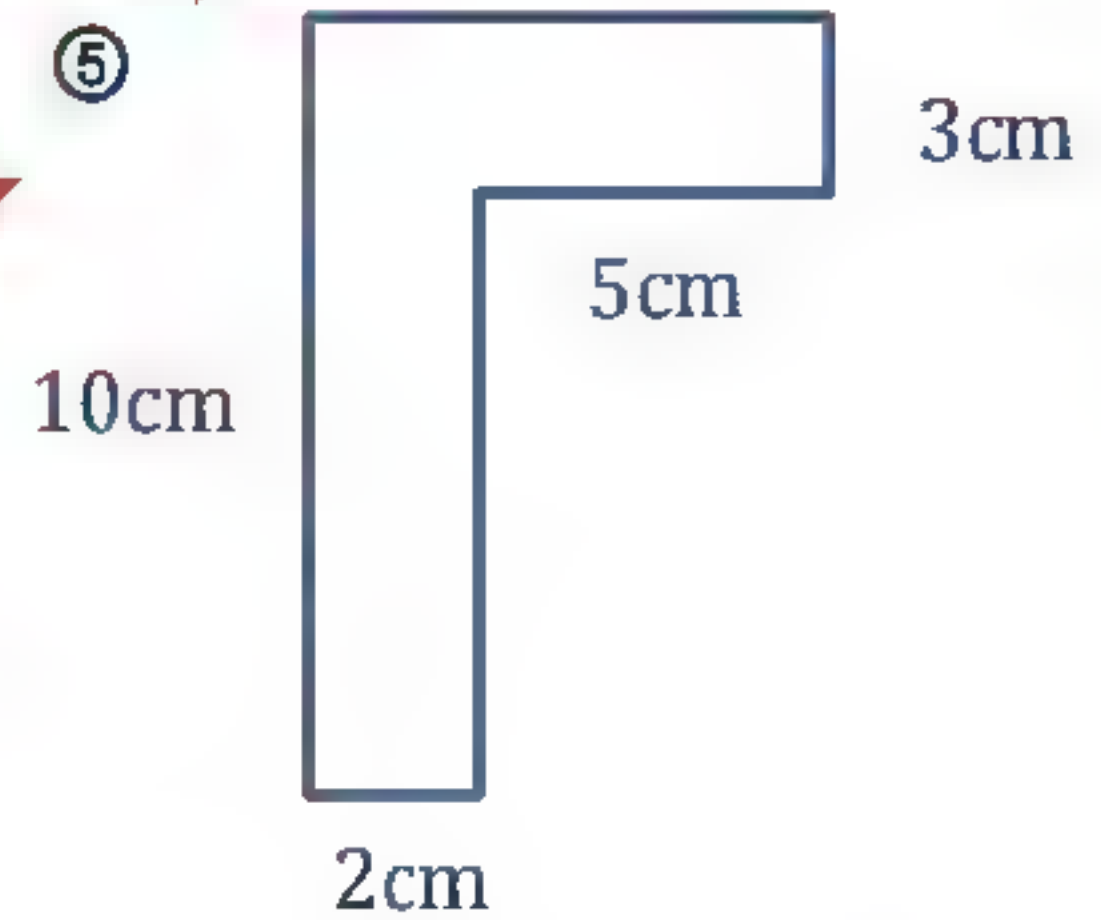
P = .....

A = .....



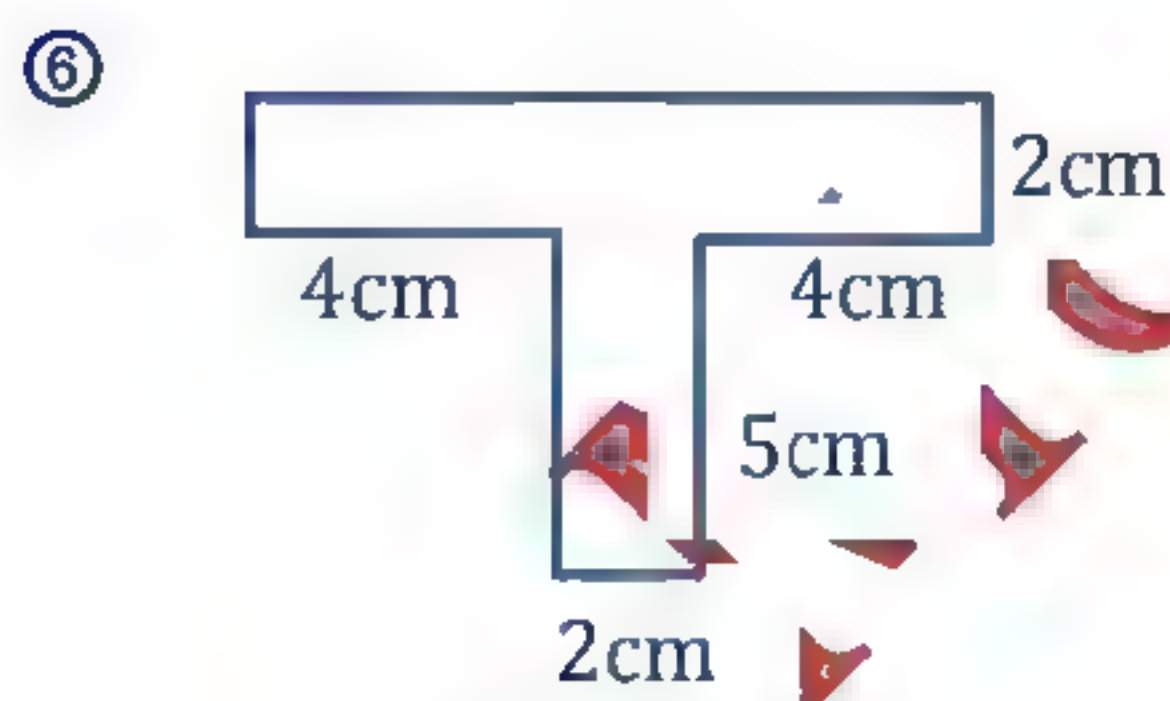
P = .....

A = .....



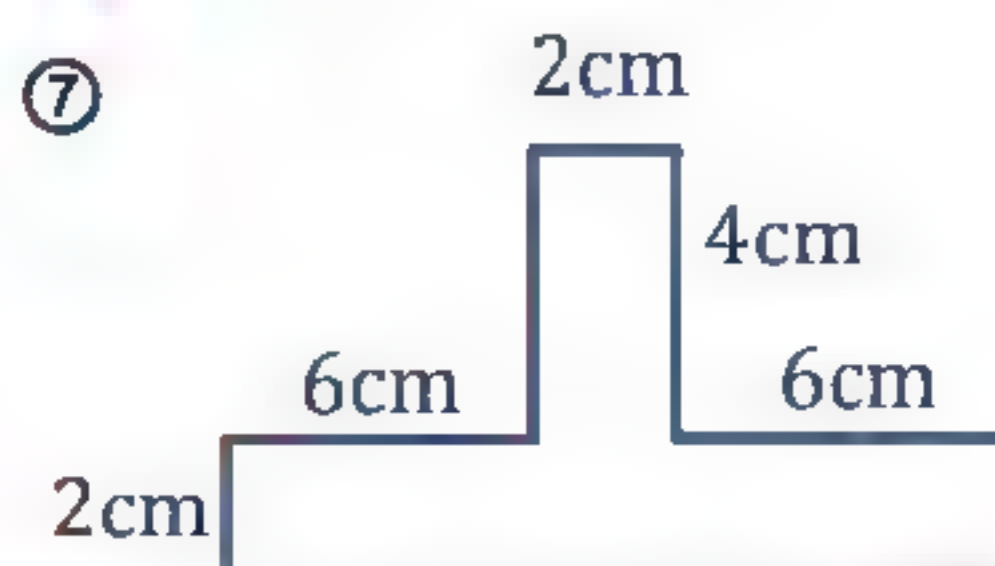
P = .....

A = .....



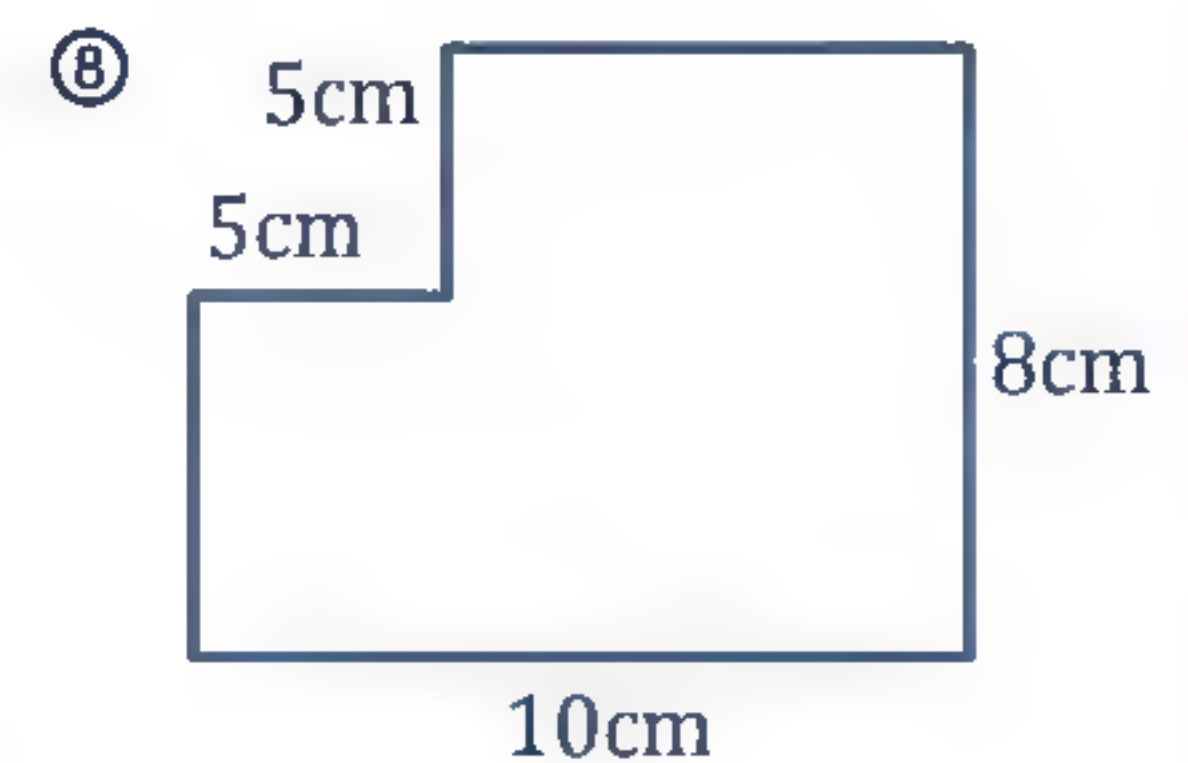
P = .....

A = .....



P = .....

A = .....



P = .....

A = .....

عندي ٦ بيضات

كم بيضة باقي

وأكلت ٢

طبخت ٢

كسرت ٢



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## Unit 5

## lessons 1-3

# ① Understanding multiplicative comparison

## Learn

You must memorize the multiplication table

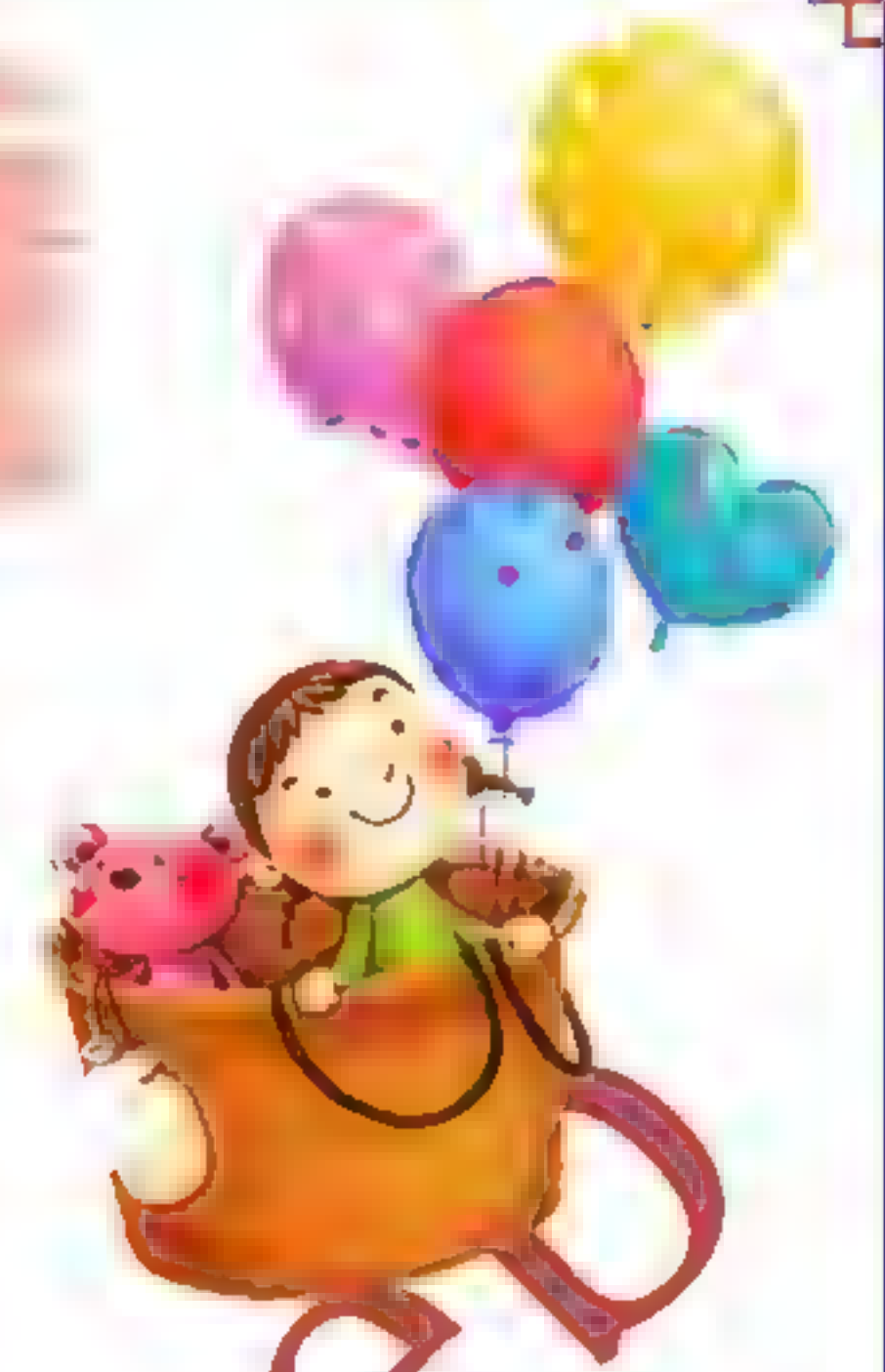
15



15 = 3 times the number 5

$$15 = 3 \times 5$$

## Times = $\times$



Ex ①: Fill in the blanks to complete :

①

18

--	--	--

18 = ..... times the number.....

$$18 = ..... \times .....$$

②

20

--	--	--	--

20 = ..... times the number.....

$$20 = ..... \times .....$$

③

35

--	--	--

35 = ..... times the number.....

$$35 = ..... \times .....$$

④

56

--	--	--	--

56 = ..... times the number.....

$$56 = ..... \times .....$$

⑤ 24 is ..... times the number 8

then  $24 = ..... \times 8$

⑥ 48 is ..... times the number 6

then  $48 = ..... \times 6$

⑦ 10 is ..... times the number 5

then  $10 = ..... \times 5$

⑧ If  $5 \times 6 = 30$ , then 30 is ..... times the number 6

⑨ If  $8 \times 9 = 72$ , then 72 is ..... times the number 8

⑩  $7 + 7 + 7 + 7 = 28$ , then  $28 = .....$

## Exercise

Choose the correct answer :

① 27 is ..... times the number 9

[ 3 , 4 , 30 , 81 ]

② 12 is 3 times the number 4 , then  $12 = .....$

[  $1 \times 12$  ,  $2 \times 6$  ,  $3 \times 4$  ,  $2 + 10$  ]

③ 6 times the number 9 = .....

[ 3 , 15 , 45 , 54 ]

④ 

8	8	8	8	8
---	---	---	---	---

 = 40 then  $40 = .....$  [  $4 \times 10$  ,  $5 \times 8$  ,  $2 \times 20$  ,  $40 + 8$  ]



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## ② Creating multiplicative comparison equation

## ③ Solving multiplicative comparison equation



**Ex① : write the equation of the following :**

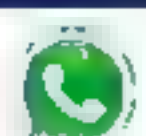
- ① If 2 times the number 4 equal  $a$  , then the suitable equation is  $2 \times 4 = a$
- ② If 5 times the number  $b$  equal 35 , then the suitable equation is .....
- ③ If 4 times the number  $x$  equal 32 , then the suitable equation is .....
- ④ If 10 times the number  $h$  equal 60 , then the suitable equation is .....
- ⑤ If 3 times the number 6 equal  $k$  , then the suitable equation is .....
- ⑥ If 6 times the number 9 equal  $m$  , then the suitable equation is .....

**Ex② : Find the value of the unknown :-**

- ① If 3 times the number 4 equal  $a$  , then the value of  $a$  = .....
- ② If 5 times the number 8 equal  $b$  , then the value of  $b$  = .....
- ③ If 6 times the number  $x$  equal 42 , then the value of  $x$  = .....
- ④ If 4 times the number  $y$  equal 36 , then the value of  $y$  = .....
- ⑤ If  $n$  times the number 8 equal 24 , then the value of  $n$  = .....
- ⑥ If 7 times the number 4 equal  $c$  , then the value of  $c$  = .....

### Exercise

- ① If 4 times the number 5 equal  $a$  , then the suitable equation is .....
- ② If 3 times the number  $b$  equal 15 , then the suitable equation is .....
- ③ If 4 times the number  $x$  equal 24 , then the suitable equation is .....
- ④ If 6 times the number  $y$  equal 48 , then the value of  $y$  = .....
- ⑤ If  $n$  times the number 4 equal 28 , then the value of  $n$  = .....
- ⑥ If 5 times the number 6 equal  $c$  , then the value of  $c$  = .....





**Ex① :** Solve the following equations :-

①  $7 \times n = 28$

$n = \dots\dots\dots$

②  $5 \times y = 0$

$y = \dots\dots\dots$

③  $m \times 9 = 36$

$m = \dots\dots\dots$

④  $7 \times 8 = h$

$h = \dots\dots\dots$

⑤  $k \times 10 = 80$

$k = \dots\dots\dots$

⑥  $4 \times 12 = b$

$b = \dots\dots\dots$

⑦  $6 \times 9 = a$

$a = \dots\dots\dots$

⑧  $2 \times r = 18$

$r = \dots\dots\dots$

⑨  $6 \times c = 42$

$c = \dots\dots\dots$

⑩  $d \times 5 = 25$

$d = \dots\dots\dots$

⑪  $e \times 4 = 16$

$n = \dots\dots\dots$

⑫  $7 \times j = 49$

$n = \dots\dots\dots$

**Ex② :** Choose the correct answer

① If  $4 \times n = 8$ , then  $n = \dots\dots\dots$

[ 2 , 4 , 12 , 32 ]

② If  $6 \times x = 36$ , then  $x = \dots\dots\dots$

[ 2 , 6 , 12 , 36 ]

③ If  $m \times 7 = 21$ , then  $m = \dots\dots\dots$

[ 3 , 14 , 12 , 28 ]

④ If  $3 \times 9 = f$ , then  $f = \dots\dots\dots$

[ 3 , 9 , 12 , 27 ]

⑤ If  $7 \times n = 7$ , then  $n = \dots\dots\dots$

[ 0 , 1 , 7 , 14 ]

### Exercise

① If  $3 \times n = 6$ , then  $n = \dots\dots\dots$

[ 2 , 3 , 9 , 18 ]

② If  $4 \times y = 36$ , then  $y = \dots\dots\dots$

[ 6 , 9 , 12 , 36 ]

③ If  $m \times 8 = 64$ , then  $m = \dots\dots\dots$

[ 3 , 14 , 8 , 32 ]

④ If  $4 \times 11 = f$ , then  $f = \dots\dots\dots$

[ 3 , 9 , 15 , 44 ]

⑤ If  $7 \times n = 0$ , then  $n = \dots\dots\dots$

[ 0 , 1 , 7 , 14 ]





## Home Work

20

① Complete the following :

- ① If 3 times the number 9 equal  $a$  , then the value of  $a$  = .....
- ② If 8 times the number  $b$  equal 72 , then the suitable equation is .....
- ③ If 5 times the number  $x$  equal 5 , then the value of  $x$  = .....
- ④ If 4 times the number  $y$  equal 48 , then the value of  $y$  = .....
- ⑤ If 3 times the number 2 equal  $k$  , then the suitable equation is .....
- ⑥ If 7 times the number 8 equal  $c$  , then the value of  $c$  = .....
- ⑦ If 3 times the number 10 equal  $a$  , then the value of  $a$  = .....
- ⑧ If 5 times the number 9 equal  $b$  , then the value of  $b$  = .....
- ⑨ If 1 times the number  $x$  equal 23 , then the value of  $x$  = .....
- ⑩ If 9 times the number  $y$  equal 81 , then the value of  $y$  = .....

② Choose the correct answer :

- ① If  $m \times 6 = 66$  , then  $m$  = ..... [ 3 , 14 , 11 , 32 ]
- ② If  $7 \times 0 = f$  , then  $f$  = ..... [ 0 , 1 , 7 , 70 ]
- ③ If  $15 \times n = 0$  , then  $n$  = ..... [ 0 , 1 , 15 , 150 ]
- ④ If  $15 \times n = 0$  , then  $n$  = ..... [ 0 , 1 , 15 , 150 ]
- ⑤ 9 times the number 3 , the comparison equation is .....  
[  $9 + 3 = a$  ,  $9 - 3 = a$  ,  $9 \times 3 = a$  ,  $9 \div 3 = a$  ]
- ⑥ the comparison equation for 3 times the number 7 =  $y$  is .....  
[  $7 + 3 = y$  ,  $7 - 3 = y$  ,  $7 \times 3 = y$  ,  $7 \div 3 = y$  ]

③ Fil in the blanks to complete :-

①                      30

--	--	--	--

30 = ..... times the number.....

30 = .....  $\times$  .....

①                      27

--	--	--	--

27 = ..... times the number.....

27 = .....  $\times$  .....





## lessons 4&amp;5

## ④ Commutative property of multiplication

## Learn

## ④ Properties of multiplication

## Commutative

Multiply two numbers in any order will get the same product

$$3 \times 7 = 7 \times 3 = 21$$

## multiplicative identity

Multiply any number by 1 will get the same number

$$8 \times 1 = 1 \times 8 = 8$$

The multiplicative identity is one (1)

## Multiplying by zero

Multiply any number by zero will get zero

$$0 \times 5 = 0$$

$$8 \times 0 = 0$$

## Ex① : Complete the following :

①  $5 \times 7 = \dots \times 5$

②  $3 \times 8 = 8 \times \dots$

③  $\dots \times 4 = 4 \times 9$

④  $9 \times \dots = 8 \times 9$

⑤  $4 \times 6 = 6 \times \dots$

⑥  $\dots \times 3 = 3 \times 5$

⑦  $5 \times \dots = 5$

⑧  $3 \times \dots = 0$

⑨  $\dots \times 4 = 4$

⑩  $6 \times 12 = \dots \times 6$

⑪  $\dots \times 8 = 0$

⑫  $\dots \times 15 = 15$

## Ex② Choose the correct answer :

①  $9 \times 12 = 12 \times 9$  is .....property

[ Commutative , multiplicative identity , Multiplying by zero , non of the previous ]

②  $7 \times 1 = 7$  is .....property

[ Commutative , multiplicative identity , Multiplying by zero , non of the previous ]

③  $6 \times 0 = 0$  is .....property

[ Commutative , multiplicative identity , Multiplying by zero , non of the previous ]

④  $4 \times 6 = 3 \times 8$  is .....property

[ Commutative , multiplicative identity , Multiplying by zero , non of the previous ]





## ⑤ Multiplying by 10 , 100 and 1,000

### Learn

$$5 \times 10 = 50$$

$$14 \times 100 = 1,400$$

$$120 \times 1,000 = 120,000$$

**Ex① : Complete the following :**

①  $5 \times 10 = \dots\dots\dots$

②  $3 \times 100 = \dots\dots\dots$

③  $\dots\dots \times 1,000 = 3,000$

④  $19 \times 10 = \dots\dots\dots$

⑤  $\dots\dots \times 6 = 60$

⑥  $\dots\dots \times 32 = 320$

⑦  $5 \times \dots\dots = 5,000$

⑧  $3 \times \dots\dots = 300$

⑨  $\dots\dots \times 14 = 1,400$

⑩  $35 \times 10 = \dots\dots$

⑪  $35 \times 100 = \dots\dots\dots$

⑫  $35 \times 1,000 = \dots\dots\dots$

### Exercise

**① Complete the following :**

①  $3 \times 7 = \dots\dots \times 5$

②  $4 \times 8 = 8 \times \dots\dots$

③  $\dots\dots \times 7 = 7 \times 9$

④  $2 \times \dots\dots = 8 \times 0$

⑤  $0 \times 6 = 8 \times \dots\dots$

⑥  $\dots\dots \times 3 = 3$

⑦  $9 \times \dots\dots = 0$

⑧  $23 \times \dots\dots = 23$

⑨  $\dots\dots \times 1 = 0$

⑩  $18 \times 10 = \dots\dots$

⑪  $30 \times 100 = \dots\dots\dots$

⑫  $13 \times 1,000 = \dots\dots\dots$

⑬  $10 \times 10 = \dots\dots$

⑭  $10 \times 100 = \dots\dots\dots$

⑮  $10 \times 1,000 = \dots\dots\dots$

⑯  $40 \times 10 = \dots\dots$

⑰  $472 \times 100 = \dots\dots\dots$

⑱  $40 \times 1,000 = \dots\dots\dots$

**② Choose the correct answer :**

①  $\dots\dots \times 6 = 600$

[ 1 , 10 , 100 , 1,000 ]

②  $7 \times \dots\dots = 7,000$

[ 1 , 10 , 100 , 1,000 ]

③  $185 \times \dots\dots = 18,500 \dots\dots\dots$

[ 1 , 10 , 100 , 1,000 ]

④  $150 \times \dots\dots = 15,000 \dots\dots\dots$

[ 1 , 10 , 100 , 1,000 ]

④  $19,000 = \dots\dots \times 19$

[ 1 , 10 , 100 , 1,000 ]





## Home Work

30

## ① Complete the following :

①  $3 \times 4 = \dots \times 3$

②  $6 \times 8 = 8 \times \dots$

③  $\dots \times 7 = 7 \times 2$

④  $2 \times \dots = 3 \times 0$

⑤  $0 \times 6 = 5 \times \dots$

⑥  $\dots \times 42 = 42$

⑦  $19 \times \dots = 0$

⑧  $23 \times \dots = 230$

⑨  $\dots \times 10 = 260$

⑩  $72 \times 10 = \dots$

⑪  $100 \times 100 = \dots$

⑫  $63 \times 1,000 = \dots$

⑬  $11 \times 10 = \dots$

⑭  $60 \times 100 = \dots$

⑮  $20 \times 1,000 = \dots$

⑯  $500 \times 10 = \dots$

⑰  $741 \times 100 = \dots$

⑱  $45 \times 1,000 = \dots$

## ② Choose the correct answer :

①  $\dots \times 2 = 200$

[ 1 , 10 , 100 , 1,000 ]

②  $3 \times \dots = 3,000$

[ 1 , 10 , 100 , 1,000 ]

③  $55 \times \dots = 5,500$

[ 1 , 10 , 100 , 1,000 ]

④  $720 \times \dots = 72,000$

[ 1 , 10 , 100 , 1,000 ]

⑤  $38,000 = \dots \times 38$

[ 1 , 10 , 100 , 1,000 ]

⑥  $17 \times 7 = 7 \times \dots$

[ 1 , 7 , 71 , 17 ]

⑦  $13 \times 9 = \dots \times 13$

[ 9 , 13 , 22 , 139 ]

⑧  $456 \times \dots = 4,560$

[ 1 , 7 , 71 , 17 ]

⑨  $32,100 = 321 \times \dots$

[ 32 , 21 , 312 , 321 ]

⑩  $0 \times 7 = 9 \times \dots$

[ 1 , 0 , 70 , 7 ]

⑪ The multiplicative identity element is .....

[ 1 , 0 , 1 , 2 ]

⑫ which of the following represent commutative property in multiplication.....

[  $3 \times 5 = 15$  ,  $4 \times 6 = 6 \times 4$  ,  $3 + 2 = 2 + 3$  ,  $5 \times 0 = 0$  ]

**What disappears**  
as soon as you say its name?

مَا الَّذِي يَخْتَفِي  
بِمَجْرَدِ أَنْ تَقُولَ اسْمَهُ؟





## Lesson 6

## Associative property of multiplication

## Learn

## Associative property

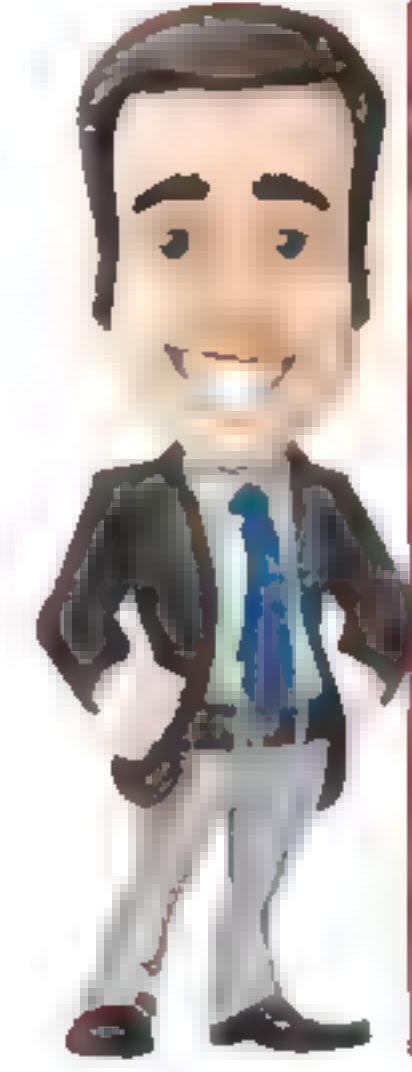
$$3 \times 2 \times 5$$

$$= (3 \times 2) \times 5$$

$$6 \times 5 = 30$$



=



$$3 \times 2 \times 5$$

$$= 3 \times (2 \times 5)$$

$$3 \times 10 = 30$$

**Ex① : Complete the following :**

①  $(3 \times 2) \times 6 = \dots \times 6$

②  $(2 \times 5) \times 7 = \dots \times 7$

③  $4 \times (3 \times 5) = 4 \times \dots$

④  $8 \times (4 \times 3) = 8 \times \dots$

⑤  $4 \times 5 \times 6 = 4 \times (5 \times \dots)$

⑥  $3 \times 4 \times 8 = 3 \times (4 \times \dots)$

⑦  $5 \times 3 \times 7 = (5 \times \dots) \times 7$

⑧  $6 \times 8 \times 9 = (\dots \times 8) \times 9$

⑨  $(7 \times 8) \times 5 = 7 \times (\dots \times 8)$

⑩  $(3 \times 5) \times 9 = 3 \times (\dots \times 9)$

**Answer the following :**

Aisha bought 3 packs of water bottles. Each pack had 3 rows of 4 water bottles. How many water bottles did Aisha buy?

**Exercise, Choose the correct answer :**

①  $(7 \times 2) \times 9 = \dots \times 9$

②  $(4 \times 2) \times 8 = \dots \times 8$

③  $6 \times (2 \times 5) = 6 \times \dots$

④  $5 \times (2 \times 3) = \dots \times 6$

⑤  $3 \times 3 \times 7 = 3 \times (\dots \times 7)$

⑥  $2 \times 4 \times 8 = 2 \times (4 \times \dots)$

[ 7 , 2 , 9 , 14 ]

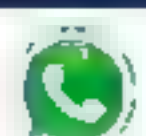
[ 4 , 2 , 8 , 16 ]

[ 5 , 2 , 6 , 10 ]

[ 2 , 3 , 5 , 30 ]

[ 7 , 3 , 10 , 21 ]

[ 2 , 4 , 7 , 8 ]





# Learn Decomposing and Associative property



$$7 \times 30 = 210$$

we use the fact  $7 \times 3 = 21$

$$4 \times 600 = 2400$$

we use the fact  $4 \times 6 = 24$

$$5,000 \times 9 = 450$$

we use the fact  $5 \times 9 = 45$

**Ex① : Complete the following :**

①  $5 \times 60 = \dots\dots\dots$

②  $2 \times 70 = \dots\dots\dots$

③  $4 \times 40 \times \dots\dots\dots$

④  $8 \times 30 = \dots\dots\dots$

⑤  $4 \times 700 = \dots\dots\dots$

⑥  $3 \times 400 = \dots\dots\dots$

⑦  $6 \times 700 = 6 \times 7 \times \dots\dots\dots$

⑧  $12,000 = 3 \times \dots\dots\dots$

⑨  $7 \times 8,000 = \dots\dots\dots$

⑩  $21,000 = \dots\dots\dots \times 7 \times 1,000$

**Answer the following :**

Hany works 20 hours a week. If he makes L.E. 6 per hour. How much does Hany make in two weeks?

.....

.....

**Exercise Choose the correct answer :**

①  $3 \times 90 = \dots\dots\dots$

[ 27 , 270 , 390 , 3,900 ]

②  $4 \times 800 = \dots\dots\dots$

[ 400 , 1,200 , 32 , 3,200 ]

③  $6 \times 30 = 6 \times 3 \times \dots\dots\dots$

[ 0 , 1 , 3 , 10 ]

④  $56,000 = \dots\dots\dots \times 8 \times 1,000$

[ 2 , 3 , 7 , 30 ]

⑤  $3,600 = 4 \times 9 \times \dots\dots\dots$

[ 0 , 100 , 10 , 1,000 ]

⑥  $3 \times 500 = 15 \times \dots\dots\dots$

[ 3 , 5 , 100 , 1,000 ]

⑦  $7 \times 3 \times 100 = 7 \times \dots\dots\dots$

[ 2 , 3 , 5 , 30 ]





## Home Work

30

## ① Complete the following :

①  $(6 \times 5) \times 8 = \dots \times 8$

③  $3 \times (3 \times 7) = 3 \times \dots$

⑤  $3 \times 4 \times 8 = 3 \times (4 \times \dots)$

⑦  $6 \times 60 = \dots$

⑨  $2 \times 4,000 \times \dots$

②  $(3 \times 5) \times 9 = \dots \times 9$

④  $9 \times (4 \times 2) = 9 \times \dots$

⑥  $7 \times 5 \times 6 = 7 \times (5 \times \dots)$

⑧  $5 \times 700 = \dots$

⑩  $8 \times 300 = 8 \times 3 \times \dots$

## ② Choose the correct answer :

①  $3 \times 20 = \dots$

[ 6 , 60 , 600 , 6,000 ]

②  $4 \times 500 = \dots$

[ 200 , 900 , 2,000 , 4,500 ]

③  $9 \times 30 = 9 \times 3 \times \dots$

[ 0 , 1 , 3 , 10 ]

④  $18,000 = \dots \times 9 \times 1,000$

[ 2 , 3 , 7 , 30 ]

⑤  $2 \times 6 \times 7 = 2 \times (\dots \times 7)$

[ 6 , 3 , 10 , 21 ]

⑥  $5 \times 6 \times 7 = 5 \times (6 \times \dots)$

[ 2 , 4 , 7 , 8 ]

## ③ Answer the following :

① Aya bought 5 packs of juice bottles. Each pack had 2 rows of 4 juice bottles. How many juice bottles did Aisha buy?

.....

.....

Andy runs 2 kilometers a day. If she runs five days a week. How many kilometers does she run in 10 weeks?

.....

.....

.....

.....

لغز للأذكاء فقط

واحد عمره ٤ سنين

واخته عمرها نص عمره

صار عمر الولد ١٠٠ سنة

كم عمر أخته ؟ D





## Unit 6

## lessons 1-2

-Identifying factors of whole numbers

-Prime and composite numbers

Learn



$$\begin{array}{ccccc}
 3 & \times & 2 & = & 6 \\
 \downarrow & & \downarrow & & \downarrow \\
 \text{Factor} & & \text{Factor} & & \text{Product}
 \end{array}$$

A factor is

a number multiplied by another number to get a product.

Ex : factors of 12 is  $1 \times 12$   $2 \times 6$   $3 \times 4$ , then 1, 2, 3, 4, 6 and 12 are all factors of 12

You can use one of this 3 ways to find all factors

Factor tree



Factor rainbow



Factor T-chart

1	36
2	18
3	12
4	9
6	6

Ex : Find all factors of the following numbers:- ( use any way )

①

16

②

24

③

28

④

48

⑤

32

⑥

45

With my best wishes

AL-MOSTAFA

01119032132





**Exercise** Find all factors of the following numbers:- ( use any way )

①	15	②	20	③	30
15 has ..... factor		20 has ..... factor		30 has ..... factor	
④	36	⑤	60	⑥	35
36 has ..... factor		60 has ..... factor		35 has ..... factor	

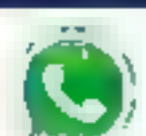
**Notes**

- ⊙ Any number is factor for itself
- ⊙ 1 is factor for all numbers
- ⊙ 2 is factor for all even numbers
- ⊙ 3 is factor for all numbers that the sum of its digit = 3,6,9,12,15,18,.....
- ⊙ 5 is factor for the numbers its ones digit 0 or 5

**Example** Choose the correct answer:-

- ① 3 is a factor of .....
- ② the number 8 has ..... factor.
- ③ 1,2,7,14 are all the factors of the number
- ④ the factor for all number is .....
- ⑤ 5 is a factor of .....
- ⑥ 25 has .....pairs of factor

- [ 4 , 13 , 21 , 23 ]
- With my best wishes
- [ 2 , 4 , 6 , 8 ]
- [ 1 , 2 , 7 , 14 ]
- 01119062132
- [ 0 , 1 , 2 , 3 ]
- [ 51 , 34 , 80 , 59 ]
- [ 2 , 3 , 6 , 12 ]





## Learn

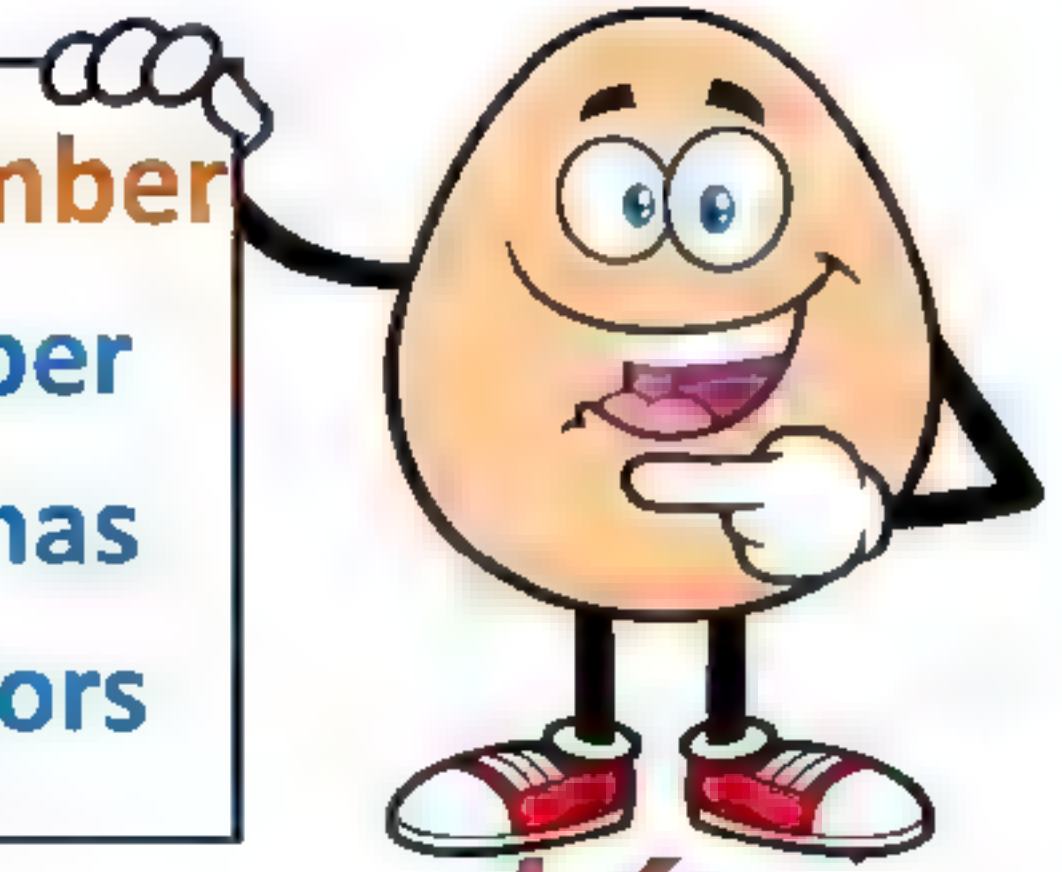
## Prime and composite numbers

**A prime number**

Is a whole number  
has only 2 different  
factors 1 and itself

**A composite number**

Is a whole number  
greater than 1 has  
more than 2 factors



**Ex:**  $2 = 1 \times 2$   
 $\downarrow \quad \downarrow$   
 Factor Factor  
 the number 2 has  
only two factors so, 2  
is a prime number

$5 = 1 \times 5$   
 $\downarrow \quad \downarrow$   
 Factor Factor  
 the number 5 has  
only two factors so, 5  
is a prime number

$10 = 1 \times 10$  and  $2 \times 5$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 Factor Factor Factor Factor  
 the number 10 has 4  
factors (1, 2, 5, 10) so, 10 is  
a composite number

**Ex:** Write all factors for each number, then check prime or composite

① 7

Prime ☐ Composite ☐

② 14

Prime ☐ Composite ☐

③ 13

Prime ☐ Composite ☐

④ 25

Prime ☐ Composite ☐

**Exercise**

Write all factors for each number, then check prime or composite

① 9

Prime ☐ Composite ☐

② 12

Prime ☐ Composite ☐

③ 20

Prime ☐ Composite ☐

④ 17

Prime ☐ Composite ☐





## A prime number

	2	3	5	7	11	13	17	19	23	29	31	37
41	43	47	53	59	61	67	71	73	79	83	89	97

## Note



- ⊙ 1 is neither prime nor composite because it has only one factor
- ⊙ 2 is the smallest prime number
- ⊙ All prime numbers are odd except 2

## Exercise Choose the correct answer.

- ①.....is a prime number.  
A. 9                      B. 16                      C. 19                      D. 21
- ②.....is a prime number  
A. 1                      B. 6                      C. 7                      D. 12
- ③..... isn't a prime number.  
A. 1                      B. 3                      C. 5                      D. 7
- ④..... is a composite number  
A. 1                      B. 3                      C. 13                      D. 15
- ⑤..... isn't a composite number.  
A. 11                      B. 12                      C. 14                      D. 20
- ⑥ The smallest prime number is .....  
A. 0                      B. 1                      C. 2                      D. 3
- ⑦ The smallest odd prime number is .....  
A. 0                      B. 1                      C. 2                      D. 3
- ⑧. The prime number between 44 and 50 is.....  
A. 45                      B. 46                      C. 47                      D. 49



لديك 1000 أضف 40 أضف 1000 أضف 30  
أضف 1000 أضف 20 أضف 1000 أضف 10  
ما هي النتيجة؟

قم بعمل هذه العملية الحسابية بعقلك فقط  
وبدون أستعمال الأوراق أو الآلة الحاسبة





# Home Work

25

## ① Choose the correct answer:-

- ① 2 is a factor of ..... [ 14 , 13 , 21 , 23 ]
- ② the number 12 has ..... factor. [ 2 , 3 , 6 , 12 ]
- ③ 1,2,3,6,9,18 are all the factors of the number [ 1 , 2 , 7 , 14 ]
- ④ ..... is the factor for all number [ 0 , 1 , 2 , 3 ]
- ⑤ 3 is a factor of ..... [ 23 , 34 , 45 , 53 ]
- ⑥ 8 has ..... pairs of factor [ 2 , 3 , 6 , 12 ]
- ⑦ ..... is a prime number [ 1 , 13 , 21 , 27 ]
- ⑧ ..... isn't a prime number. [ 11 , 1 , 2 , 3 ]
- ⑨ The smallest odd prime number is ..... [ 1 , 2 , 0 , 3 ]

## ② Write all factors for each number, then check prime or composite

① 6  Prime <input type="radio"/> Composite <input type="radio"/>	② 11  Prime <input type="radio"/> Composite <input type="radio"/>	③ 15  Prime <input type="radio"/> Composite <input type="radio"/>	④ 19  Prime <input type="radio"/> Composite <input type="radio"/>
⑤ 21  Prime <input type="radio"/> Composite <input type="radio"/>	⑥ 25  Prime <input type="radio"/> Composite <input type="radio"/>	⑦ 31  Prime <input type="radio"/> Composite <input type="radio"/>	⑧ 40  Prime <input type="radio"/> Composite <input type="radio"/>





## Lesson 3

## Greatest common factor (G.C.F)

## Learn

Ex : Find the factors and (G.C.F) for each pair:

IMPORTANT

12 and 15	
12	15
Common factors : .....	
G.C.F is .....	

16 and 28	
16	28
Common factors : .....	
G.C.F is .....	

## Exercise

Find the factors and (G.C.F) for each pair:

① 12 and 15	
12	15
Common factors : .....	
G.C.F is .....	

② 16 and 28	
16	28
Common factors : .....	
G.C.F is .....	

① 12 and 9	
12	9
Common factors : .....	
G.C.F is .....	

② 25 and 15	
25	15
Common factors : .....	
G.C.F is .....	

## Note

⊙ 1 is common factor for all whole numbers

⊙ Any two prime numbers have one common factor is 1





## Home Work

30

## ① Choose the correct answer:-

- ① The common factor of all numbers is ... [ 0 , 1 , 2 , 50 ]
- ② ..... is common factor of 12 and 18. [ 4 , 5 , 6 , 12 ]
- ③ ..... is G.C.F of 6 and 15. [ 1 , 2 , 3 , 15 ]
- ④ the G.C.F of 18 and 27. [ 2 , 3 , 6 , 9 ]
- ⑤ the G.C.F of 20 and 30. [ 1 , 4 , 5 , 10 ]

## ② Find the factors and (G.C.F) for each pair

①	40 and 50	
	40	50
Common factors : .....		
G.C.F is .....		

②	8 and 12	
	8	12
Common factors : .....		
G.C.F is .....		

③	10 and 15	
	10	15
Common factors : .....		
G.C.F is .....		

④	18 and 45	
	18	45
Common factors : .....		
G.C.F is .....		

⑤	32 and 40	
	32	40
Common factors : .....		
G.C.F is .....		

⑥	24 and 12	
	24	12
Common factors : .....		
G.C.F is .....		





## lessons 4 &amp; 5

# Identifying multiples of whole numbers

## Common multiples

**Learn** A multiple is the product of multiply the given number by other numbers

Zero is common multiple of all numbers

Ex : ① multiples of 2 are 0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ..... and so on.

All even numbers are multiple of 2

② multiples of 3 are 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ..... and so on.

All numbers that the sum of its digit 3, 6, 9, 12, 15, 18, ..... are multiple of 3

③ multiples of 5 are 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ..... and so on.

All numbers that the ones digit is 0 or 5 are multiple of 5

**Exercise** List 4 multiple for each of the following

① 4 → .....

② 6 → .....

① 8 → .....

② 10 → .....

**Learn** A common multiple is a multiple of two or more numbers

Ex ① : find 3 common multiple for :

①	2 and 3
2	.....
3	.....
Common multiples: .....	

②	4 and 8
4	.....
8	.....
Common multiples: .....	





**Exercise** Find 3 common multiple for :

①	4 and 6
2	.....
3	.....
Common multiples: .....	

②	5 and 10
5	.....
10	.....
Common multiples: .....	

③	2 and 5
2	.....
5	.....
Common multiples: .....	

④	6 and 12
6	.....
12	.....
Common multiples: .....	

**Ex① :** Choose the correct answer:

- ① The number that is multiple of 6 is ..... [ 7 , 16 , 24 , 46 ]
- ② The number that is not multiple of 3 is ..... [ 3 , 21 , 13 , 36 ]
- ③ 20 is multiple of ..... [ 3 , 6 , 8 , 10 ]
- ④ Which is a common multiple of 5 and 8 ..... [ 20 , 40 , 35 , 45 ]
- ⑤ Which is a common multiple of 10 and 20 ..... [ 10 , 15 , 20 , 25 ]

**Exercise** Choose the correct answer:

- ① The number that is multiple of 8 is ..... [ 7 , 16 , 28 , 46 ]
- ② The number that is not multiple of 7 is ..... [ 0 , 21 , 17 , 35 ]
- ③ ..... is a common multiple of all numbers ..... [ 0 , 1 , 2 , 3 ]
- ④ Which is a common multiple of 2 and 3 ..... [ 2 , 3 , 12 , 21 ]
- ⑤ Which is a common multiple of 4 and 5 ..... [ 10 , 15 , 20 , 25 ]

خذ أول حرف من كل صورة

استخرج اسم الدولة





# Home Work

20

## ① Choose the correct answer:

- ① The number that is multiple of 3 is ... [ 7 , 16 , 24 , 46 ]
- ② The number that is not multiple of 3 is ... [ 3 , 9 , 23 , 27 ]
- ③ 30 is multiple of ... [ 3 , 6 , 10 , all previous ]
- ④ Which is a common multiple of 5 and 7 ... [ 20 , 40 , 35 , 45 ]
- ⑤ Which is a common multiple of 3 and 9 ... [ 3 , 6 , 21 , 29 ]
- ⑥ 20 is a common multiple of ... [ 2 and 6 , 3 and 5 , 3 and 4 , 2 and 5 ]

## ② Complete :

- ① The common multiple of all numbers is .....
- ② All even numbers are multiple of .....
- ③ All numbers that the ones digit is 0 or 5 are multiple of .....
- ④ 12 is a common multiple of 2 and .....
- ⑤ ..... is a common multiple of 3 and 5

## ③ Write the multiples of 3 and 4 up to 30 , then find the common multiples :

Multiples of 3 .....

Multiples of 4 .....

The common multiples .....

## ④ Write the multiples of 6 and 8 up to 40 , then find the common multiples :

Multiples of 6 .....

Multiples of 8 .....

The common multiples .....

## ④ Write the multiples of 5 and 10 up to 50 , then find the common multiples :

Multiples of 5 .....

Multiples of 10 .....

The common multiples .....





## lessons 6

## Relation between factors and multiples

## Learn

$$3 \times 5 = 15$$

$\downarrow$        $\downarrow$        $\downarrow$   
 Factor   Factor   Multiple

3 and 5 are factors of 15  
 15 is multiples of 3 and 5

$$4 \times 7 = 28$$

$\downarrow$        $\downarrow$        $\downarrow$   
 Factor   Factor   Multiple

4 and 7 are factors of 28  
 28 is multiples of 4 and 7

Ex① : Complete the following :

- ① If  $2 \times 4 = 8$ , then 2 and 4 are a factors of .....  
 ② If  $3 \times 7 = 21$ , then 21 is a multiple of .....  
 ③ 6 is a multiple of .....      ④ 6 is a factor of .....  
 ⑤ ..... is a multiple of 8      ⑥ ..... is a factor of 8

**Exercise** Choose Factor or Multiple to each of the following :

- ① 6 is a ..... of 3      [ Factor or Multiple ]  
 ② 4 is a ..... of 12      [ Factor or Multiple ]  
 ③ 15 is a ..... of 3      [ Factor or Multiple ]  
 ④ 24 is a ..... of 8      [ Factor or Multiple ]  
 ⑤ 14 is a ..... of 7      [ Factor or Multiple ]  
 ⑥ 9 is a ..... of 27      [ Factor or Multiple ]  
 ⑦ 8 is a ..... of 4      [ Factor or Multiple ]  
 ⑧ 5 is a ..... of 30      [ Factor or Multiple ]  
 ⑨ 10 is a ..... of 5      [ Factor or Multiple ]  
 ⑩ 6 is a ..... of 18      [ Factor or Multiple ]





## Home Work

15

Ex① : Complete the following :

- ① If  $4 \times 9 = 36$ , then 4 and 9 are a factors of .....
- ② If  $6 \times 7 = 42$ , then 42 is a multiple of .....
- ③ 9 is a multiple of .....
- ④ 4 is a factor of .....
- ⑤..... is a multiple of 7
- ⑥..... is a factor of 20

**Exercise** Choose Factor or Multiple to each of the following :

- ① 21 is a ..... of 3 [ Factor or Multiple ]
- ② 4 is a ..... of 20 [ Factor or Multiple ]
- ③ 1 is a ..... of 3 [ Factor or Multiple ]
- ④ 24 is a ..... of 12 [ Factor or Multiple ]
- ⑤ 35 is a ..... of 7 [ Factor or Multiple ]
- ⑥ 9 is a ..... of 45 [ Factor or Multiple ]
- ⑦ 12 is a ..... of 4 [ Factor or Multiple ]
- ⑧ 5 is a ..... of 25 [ Factor or Multiple ]
- ⑨ 10 is a ..... of 20 [ Factor or Multiple ]
- ⑩ 9 is a ..... of 18 [ Factor or Multiple ]



أين يمكنك العثور  
على أنهار بلا مياه  
ومدن بلا بنايات  
وغابات بدون أشجار؟

With my best wishes

MOSTAFA

01119062132



01119062132



## Unit 7

## lessons 1&amp;2

## ① The area model strategy

## ② The distributive property

Area of rectangle = length x width

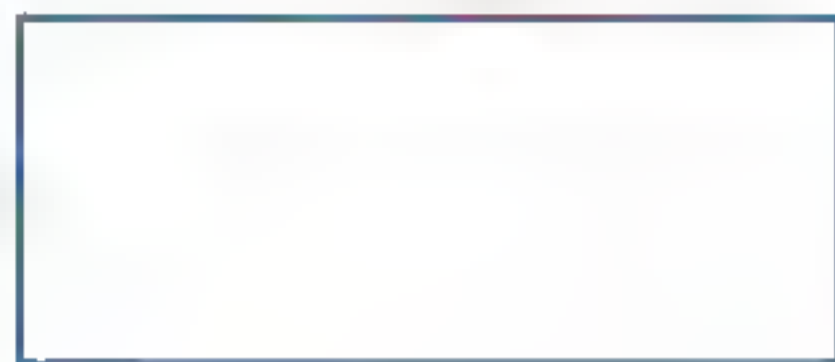
$A = L \times W$

**Learn**We can use area of a rectangle to find  $4 \times 15$  as following

①

15

4

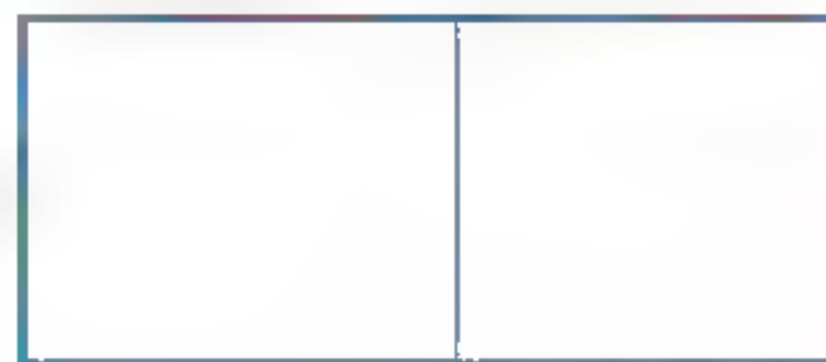


②

10

5

4

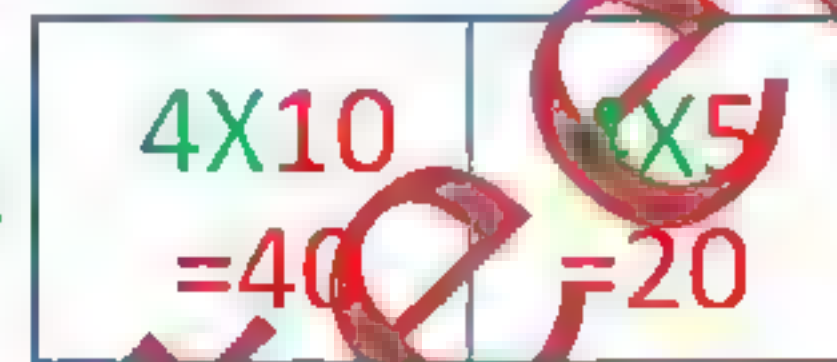


③

10

5

4

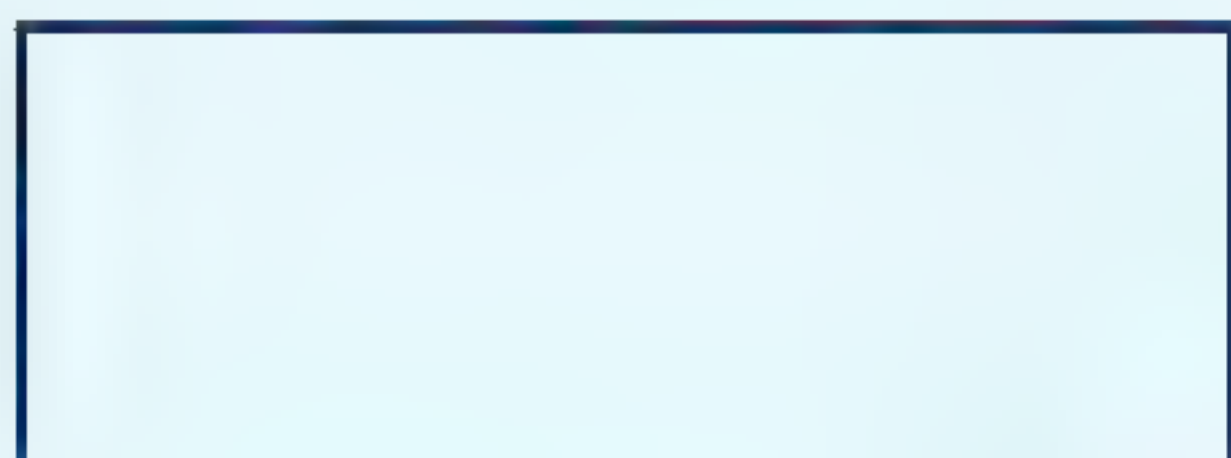


$= 40 + 20 = 60$

**Ex①** : Find the product of the following by using area model :

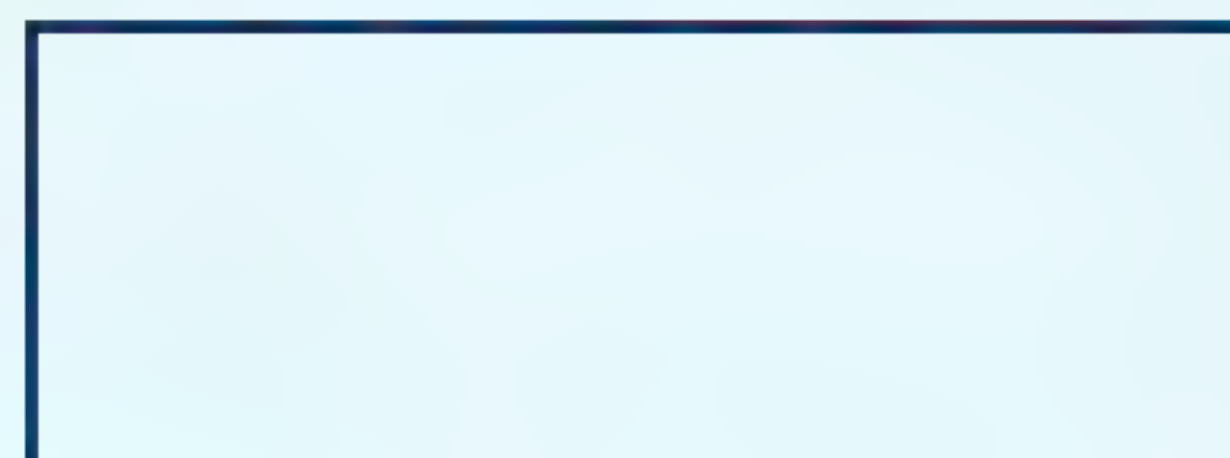
①

$5 \times 83$

 $= \dots\dots\dots = \dots\dots\dots$ 

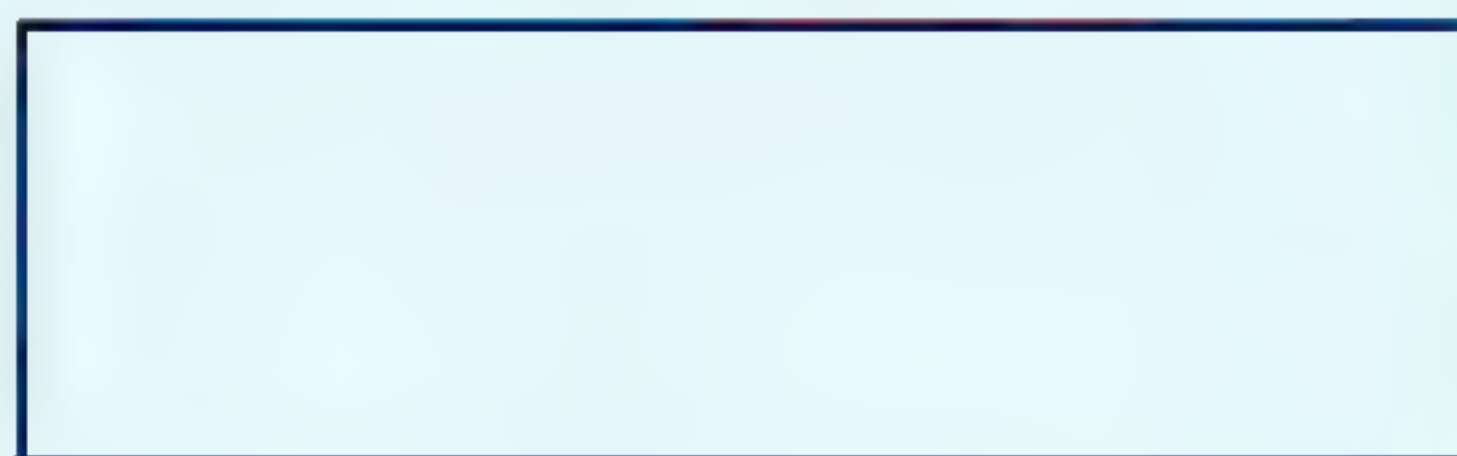
②

$6 \times 156$

 $= \dots\dots\dots = \dots\dots\dots$ 

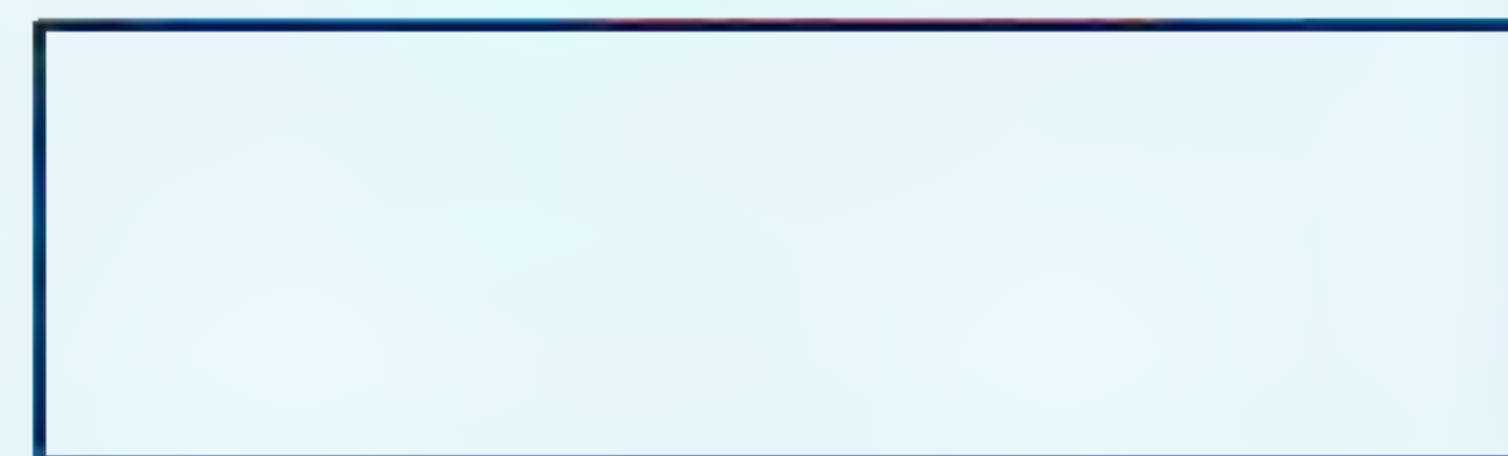
③

$407 \times 8$

 $= \dots\dots\dots = \dots\dots\dots$ 

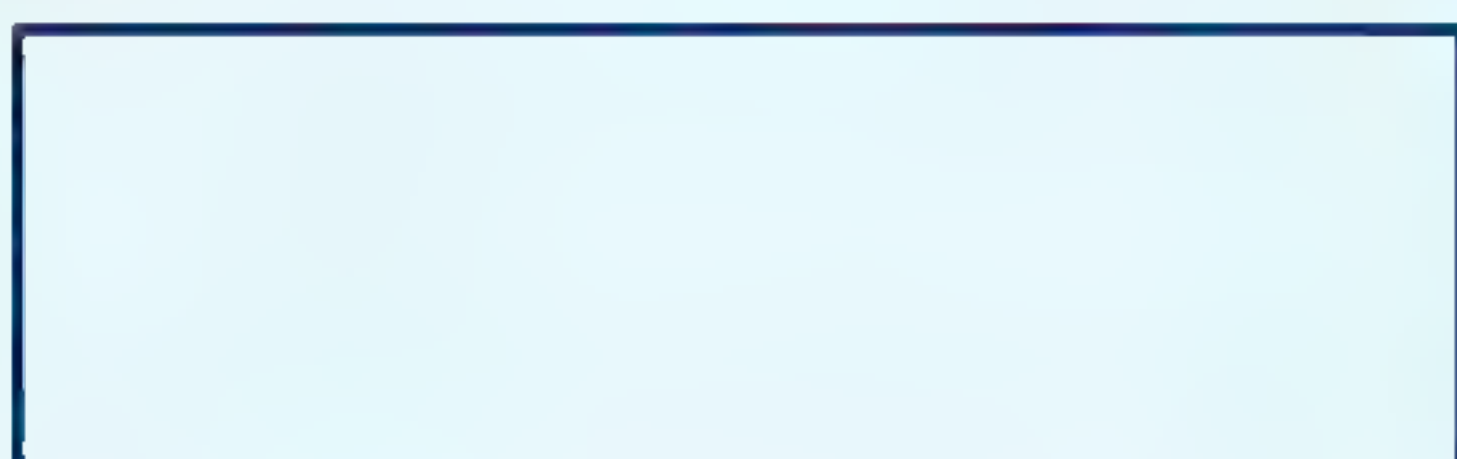
④

$2,369 \times 3$

 $= \dots\dots\dots = \dots\dots\dots$ 

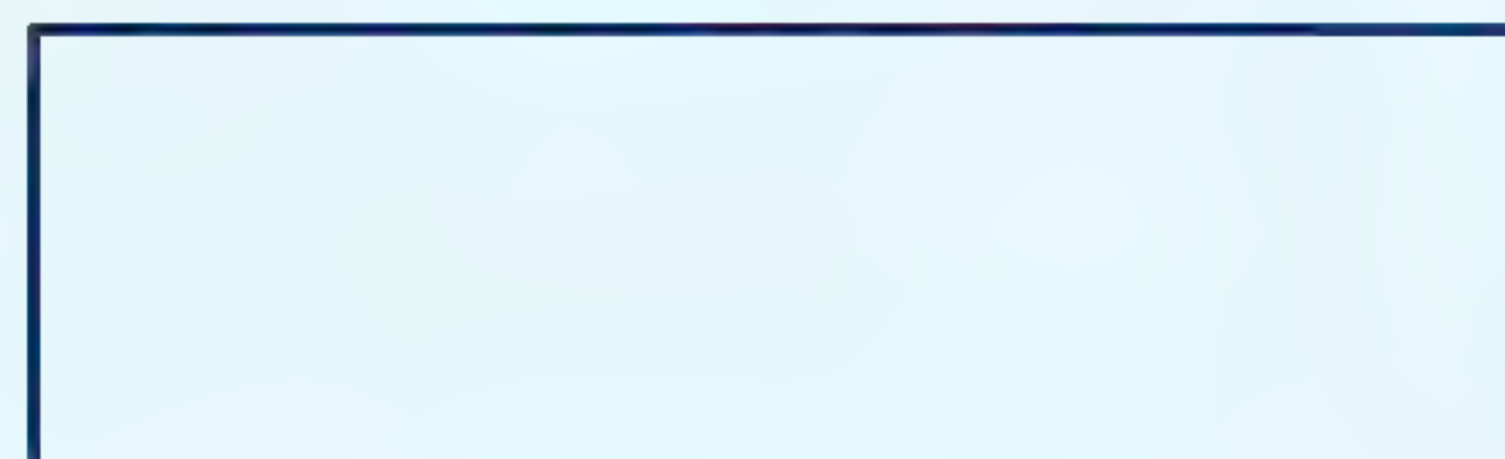
⑤

$7 \times 51$

 $= \dots\dots\dots = \dots\dots\dots$ 

⑥

$94 \times 9$

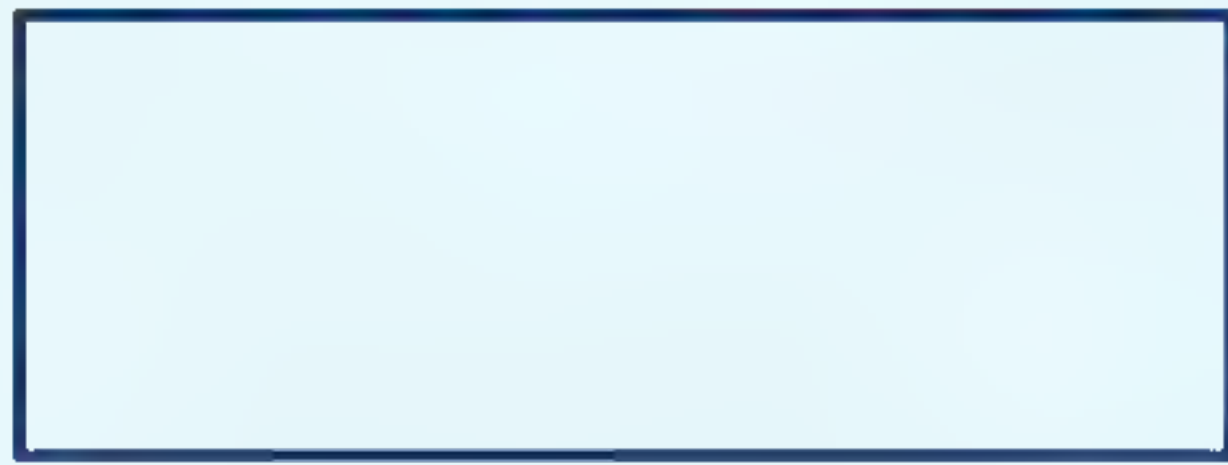
 $= \dots\dots\dots = \dots\dots\dots$ 



**Exercise** Find the product of the following by using area model :

①

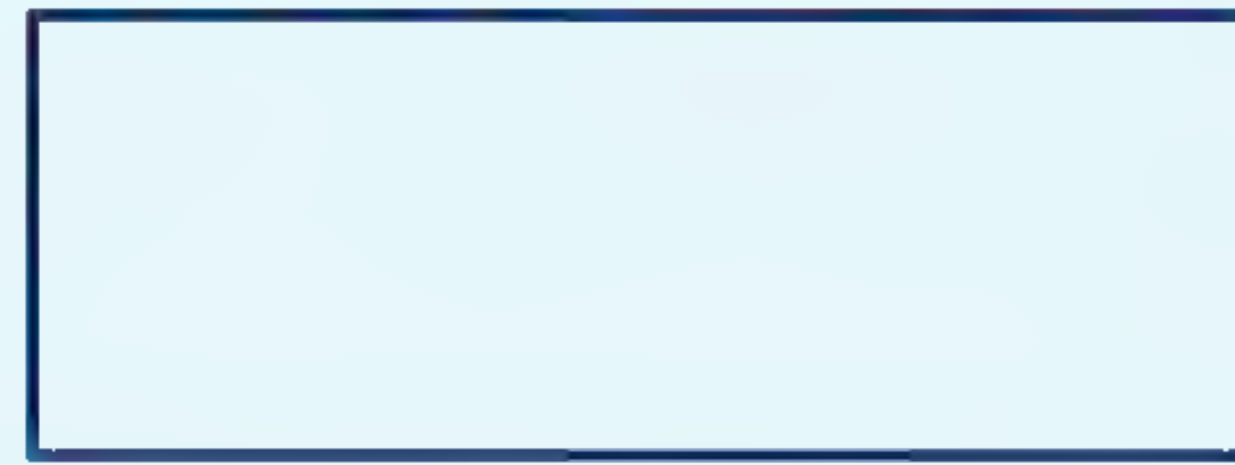
$3 \times 45$



= ..... = .....

②

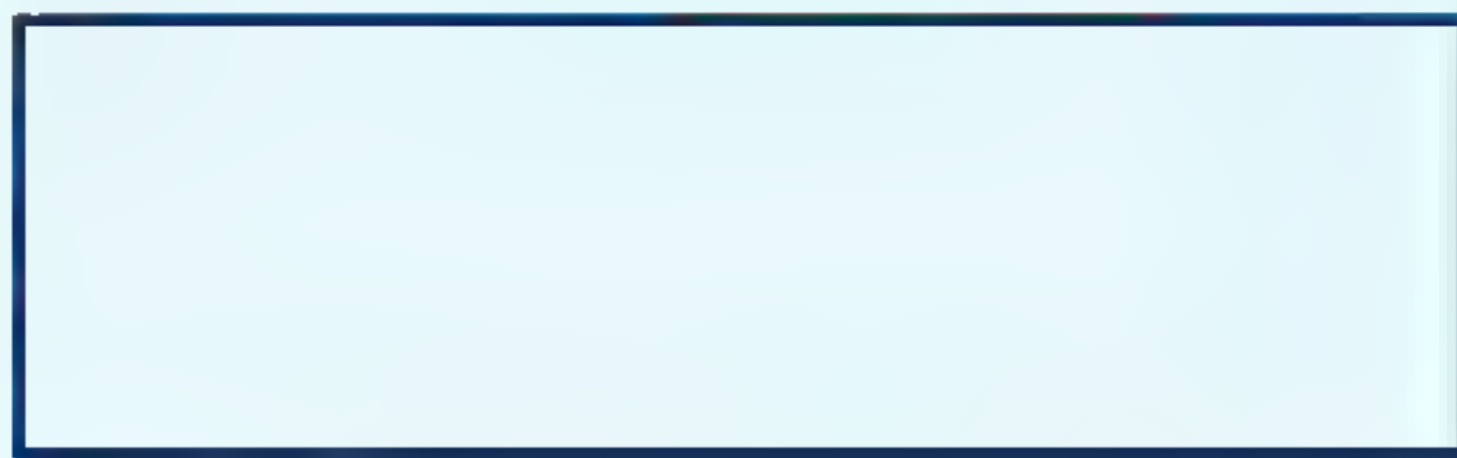
$5 \times 125$



= ..... = .....

③

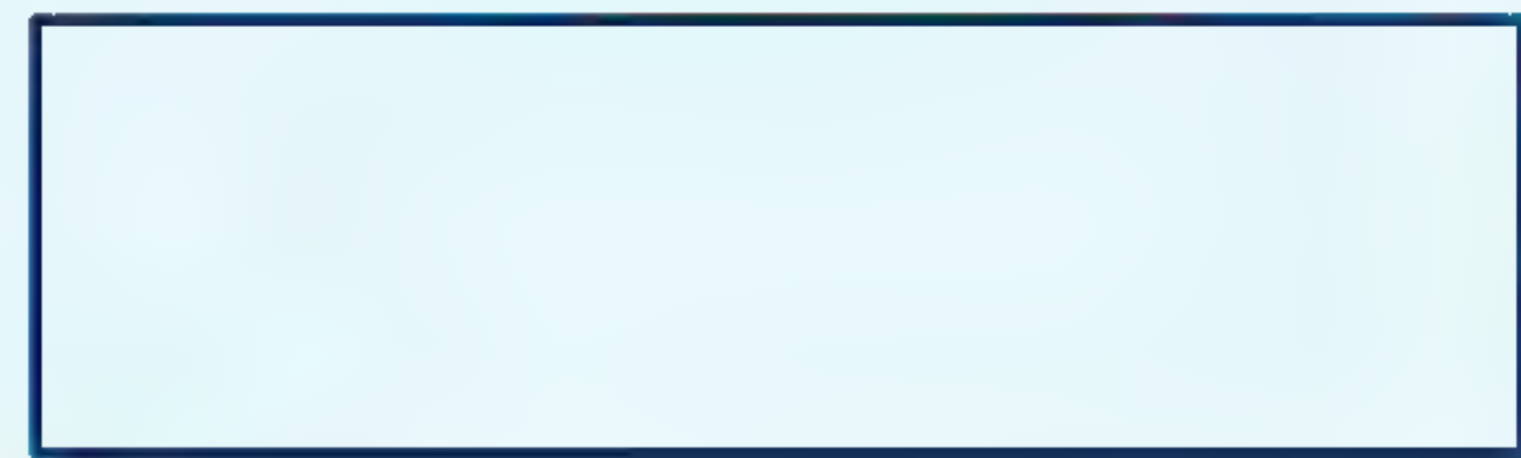
$205 \times 8$



= ..... = .....

④

$1,352 \times 7$



= ..... = .....

### The distributive property

**Learn**

We can use The distributive property to find  $4 \times 15$  as following

①

$4 \times 15$



②

$4 \times 15$

$4 \times 10 + 4 \times 5$

③

$4 \times 15$

$4 \times 10 + 4 \times 5$

$40 + 20 = 60$

**Ex①** : Find the product of the following by distributive property :

①

$3 \times 58$

.....  
.....  
.....

②

$7 \times 412$

.....  
.....  
.....

**Which strategy do you like more ?**

**Area model**

**Distributive property**





## Home Work

30

① : Find the product of the following (by using any way)

①

$5 \times 56$

②

$67 \times 4$

③

$3 \times 255$

④

$7 \times 206$

⑤

$723 \times 7$

⑥

$5 \times 1,193$

شغل مضحك



رشيء في جسمك من ثلاثة احرف الاول و الثاني طائر  
الاول و الثالث مشروب مشهور و الثاني و الثالث وحدة موازين  
و الثاني و الثالث وحدة موازين ماهو ؟





lessons 3&amp;4

## ③ The Partial products Algorithm

## ④ The Standard Multiplication Algorithm

Learn

## The Partial products Algorithm

$3 \times 84$

$$\begin{array}{r}
 84 \\
 \times 3 \\
 \hline
 12 \leftarrow (3 \times 4) \text{ Multiply ones} \\
 + 240 \leftarrow (3 \times 80) \text{ Multiply tens} \\
 \hline
 252
 \end{array}$$

$315 \times 6$

$$\begin{array}{r}
 315 \\
 \times 6 \\
 \hline
 30 \leftarrow (6 \times 5) \text{ Multiply ones} \\
 + 60 \leftarrow (6 \times 10) \text{ Multiply tens} \\
 + 1,800 \leftarrow (6 \times 300) \text{ Multiply hundreds} \\
 \hline
 1,890
 \end{array}$$

**Ex① :** Find the product of the following by The Partial products Algorithm

①

$6 \times 28$

---

---

---

---

---

②

$7 \times 239$

---

---

---

---

---

**Exercise :** Find the product of the following by The Partial products Algorithm

①

$4 \times 73$

---

---

---

---

---

②

$8 \times 132$

---

---

---

---

---





# Learn The Standard Multiplication Algorithm

$$\begin{array}{r} 3 \times 84 \\ \textcircled{1} \quad 84 \\ \times \quad 3 \\ \hline 252 \end{array}$$

$$\begin{array}{r} 5 \times 254 \\ \textcircled{2} \textcircled{2} \quad 254 \\ \times \quad 5 \\ \hline 1,270 \end{array}$$

$$\begin{array}{r} 7 \times 2,345 \\ \textcircled{2} \textcircled{3} \textcircled{3} \quad 2345 \\ \times \quad 7 \\ \hline 16,415 \end{array}$$

**Ex① :** Find the product of the following by Standard Multiplication Algorithm

$$\begin{array}{r} \textcircled{1} \quad 29 \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{2} \quad 6 \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{3} \quad 5 \times 478 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{4} \quad 7 \times 609 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{5} \quad 325 \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{6} \quad 4 \times 1,375 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{7} \quad 2 \times 4,125 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{8} \quad 9 \times 2,054 \\ \hline \end{array}$$

**Exercise :** Find the product of the following by Multiplication Algorithm

$$\begin{array}{r} \textcircled{1} \quad 5 \times 25 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{2} \quad 6 \times 45 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{3} \quad 8 \times 478 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{4} \quad 7 \times 2,305 \\ \hline \end{array}$$





# Home Work

30

① : Find the product of the following by The Partial products Algorithm

①

$$6 \times 42$$

---

---

---

---

---

②

$$8 \times 217$$

---

---

---

---

---

② : Find the product of the following by Standard Multiplication Algorithm

③

$$35 \times 4$$

---

---

---

---

---

④

$$6 \times 19$$

---

---

---

---

---

⑤

$$5 \times 408$$

---

---

---

---

---

⑥

$$7 \times 742$$

---

---

---

---

---

⑦

$$759 \times 3$$

---

---

---

---

---

⑧

$$4 \times 1,625$$

---

---

---

---

---

⑨

$$2 \times 875$$

---

---

---

---

---

⑩

$$6 \times 2,054$$

---

---

---

---

---

⑪

$$415 \times 3$$

---

---

---

---

---

⑫

$$4 \times 1,803$$

---

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⑬

$$3 \times 4,125$$

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---

⑭

$$5 \times 2,004$$

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## lessons 5&amp;6

## ⑤ Exploring remainders

## ⑥ Pattern and place value in division

**Learn**

If we want to divide 17 pencils into 3 pencil case , How many pencil there in each one ? and how many pencils are left?

$$17 \div 3 = 5 \text{ R } 2$$

↓
↓
↓
↓

Dividend      Divisor      Quotient      Remainder

**Notes**

- Always the remainder must be less than the divisor.
- The dividend = divisor × quotient + remainder

**Ex①** : Find the quotient and the remainder of the following

①  $11 \div 3 = \dots R \dots$

②  $11 \div 4 = \dots R \dots$

③  $22 \div 6 = \dots R \dots$

④  $12 \div 5 = \dots R \dots$

⑤  $7 \div 2 = \dots R \dots$

⑥  $18 \div 7 = \dots R \dots$

⑦  $35 \div 6 = \dots R \dots$

⑧  $24 \div 7 = \dots R \dots$

⑨  $12 \div 3 = \dots R \dots$

⑩  $10 \div 2 = \dots R \dots$

⑪  $19 \div 3 = \dots R \dots$

⑫  $20 \div 6 = \dots R \dots$

**Exercise** Complete the following

①  $7 \div 3 = \dots R \dots$

②  $10 \div 4 = \dots R \dots$

③  $25 \div 6 = \dots R \dots$

④  $32 \div 5 = \dots R \dots$

⑤  $15 \div 3 = \dots R \dots$

⑥  $30 \div 7 = \dots R \dots$





**Learn****Pattern and place value in division**

$8 \div 2 = 4$

$80 \div 2 = 40$

$800 \div 2 = 400$

$8,000 \div 2 = 4,000$

$15 \div 3 = 5$

$150 \div 3 = 50$

$1500 \div 3 = 500$

$15,000 \div 3 = 5,000$

$20 \div 4 = 5$

$200 \div 4 = 50$

$2000 \div 4 = 500$

$20,000 \div 4 = 5,000$

**Ex①** : Find the quotient of the following

①  $9 \div 3 = \dots\dots$

②  $900 \div 3 = \dots\dots$

③  $9,000 \div 3 = \dots\dots$

④  $32 \div 4 = \dots\dots$

⑤  $3,20 \div 4 = \dots\dots$

⑥  $32,000 \div 4 = \dots\dots$

⑦  $350 \div 5 = \dots\dots$

⑧  $3,500 \div 5 = \dots\dots$

⑨  $35,000 \div 5 = \dots\dots$

**Exercise**Choose the correct answer :

①  $23 \div 4 = \dots\dots\dots$

[ 3 R2 , 5 R2 , 5 R3 , 5 R4 ]

②  $25 \div 8 = \dots\dots\dots$

[ 3 R2 , 3 R1 , 1 R3 , 3 R4 ]

③  $45 \div 7 = \dots\dots\dots$

[ 3 R6 , 5 R3 , 6 R3 , 5 R2 ]

④  $37 \div 5 = \dots\dots\dots$

[ 7 R2 , 5 R2 , 7 R5 , 7 R3 ]

⑤  $69 \div 8 = \dots\dots\dots$

[ 8 R2 , 9 R6 , 5 R8 , 8 R5 ]

⑥  $3,500 \div 5 = \dots\dots\dots$

[ 50 , 70 , 500 , 700 ]

⑦  $120 \div 2 = \dots\dots\dots$

[ 40 , 30 , 60 , 50 ]

⑧  $270 \div 9 = \dots\dots\dots$

[ 90 , 9 , 3 , 30 ]

⑨ If  $34 \div 8 = 4 R2$  , then 2 is called .....

[ dividend , divisor , qoutient , remainder ]

⑩ If  $19 \div 5 = 3 R4$  , then 5 is called .....

[ dividend , divisor , qoutient , remainder ]





## Home Work

30

## ① Choose the correct answer :

- ①  $33 \div 6 = \dots\dots\dots$  [ 3 R2 , 5 R2 , 5 R3 , 5 R4 ]
- ②  $31 \div 9 = \dots\dots\dots$  [ 3 R2 , 3 R1 , 1 R3 , 3 R4 ]
- ③  $27 \div 7 = \dots\dots\dots$  [ 3 R6 , 5 R3 , 6 R3 , 5 R2 ]
- ④  $42 \div 8 = \dots\dots\dots$  [ 7 R2 , 5 R2 , 7 R5 , 7 R3 ]
- ⑤  $49 \div 5 = \dots\dots\dots$  [ 8 R2 , 9 R6 , 9 R4 , 8 R5 ]
- ⑥  $1,500 \div 3 = \dots\dots\dots$  [ 50 , 70 , 500 , 700 ]
- ⑦  $240 \div 6 \dots\dots\dots$  [ 40 , 30 , 60 , 50 ]
- ⑧  $360 \div 9 \dots\dots\dots$  [ 90 , 9 , 4 , 40 ]
- ⑨ If  $50 \div 8 = 6 \text{ R}2$ , then 50 is called .....  
[ dividend , divisor , qoutient , remainder ]
- ⑩ If  $66 \div 7 = 9 \text{ R}3$ , then 9 is called .....  
[ dividend , divisor , qoutient , remainder ]

## ②: Find the quotient and the remainder of the following

- |   |   |   |
|---|---|---|
| ① $17 \div 3 = \dots\dots \text{ R} \dots\dots$ | ② $35 \div 4 = \dots\dots \text{ R} \dots\dots$ | ③ $53 \div 5 = \dots\dots \text{ R} \dots\dots$ |
| ④ $48 \div 9 = \dots\dots \text{ R} \dots\dots$ | ⑤ $38 \div 7 = \dots\dots \text{ R} \dots\dots$ | ⑥ $19 \div 4 = \dots\dots \text{ R} \dots\dots$ |
| ⑦ $29 \div 3 = \dots\dots \text{ R} \dots\dots$ | ⑧ $44 \div 8 = \dots\dots \text{ R} \dots\dots$ | ⑨ $22 \div 4 = \dots\dots \text{ R} \dots\dots$ |

## ③ Find the quotient of the following

- |                             |                               |                                |
|-----------------------------|-------------------------------|--------------------------------|
| ① $14 \div 2 = \dots\dots$  | ② $140 \div 2 = \dots\dots$   | ③ $1,400 \div 2 = \dots\dots$  |
| ④ $20 \div 4 = \dots\dots$  | ⑤ $200 \div 4 = \dots\dots$   | ⑥ $20,000 \div 4 = \dots\dots$ |
| ⑦ $150 \div 5 = \dots\dots$ | ⑧ $1,500 \div 5 = \dots\dots$ | ⑨ $15,000 \div 5 = \dots\dots$ |





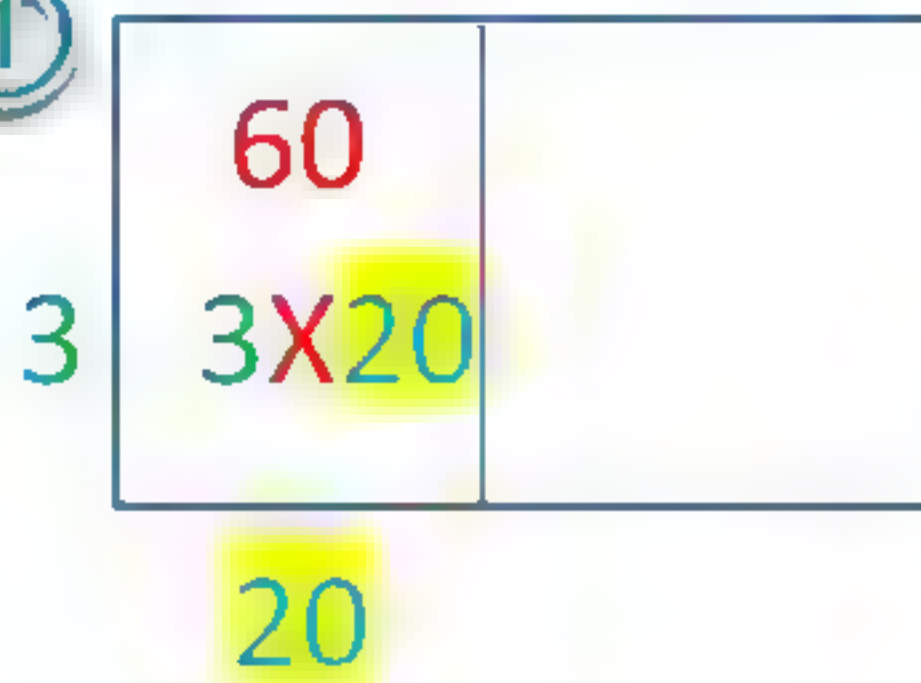
## Lesson 7

## ⑦ The area model and division

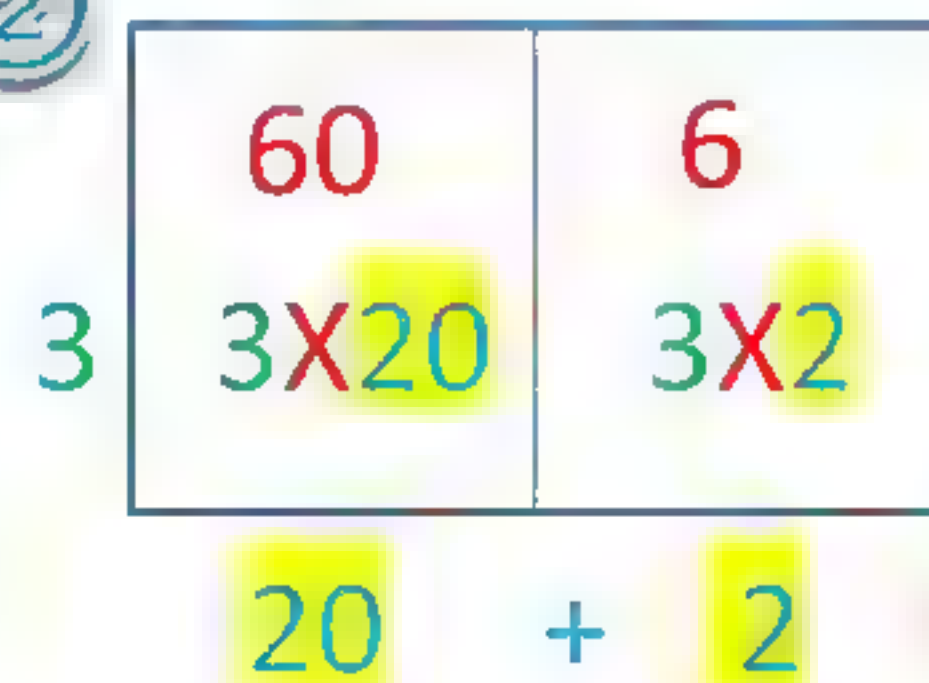
## Learn

We can use area of a rectangle to find  $67 \div 3$  as following

①



②



③

Add  $20 + 2 = 22$ 

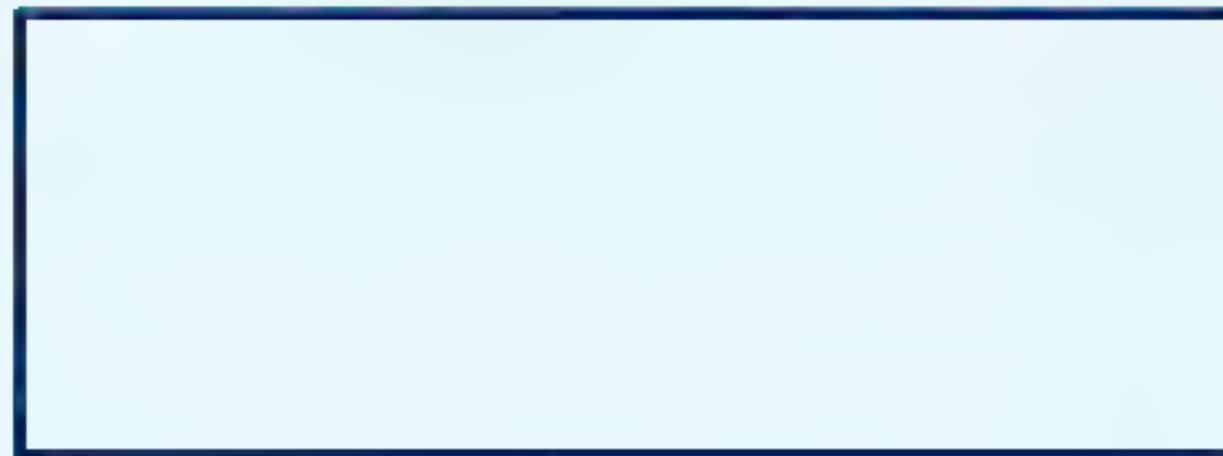
So,

$$67 \div 3 = 22 \text{ R}1$$

Ex① : Use the area model to solve :

①

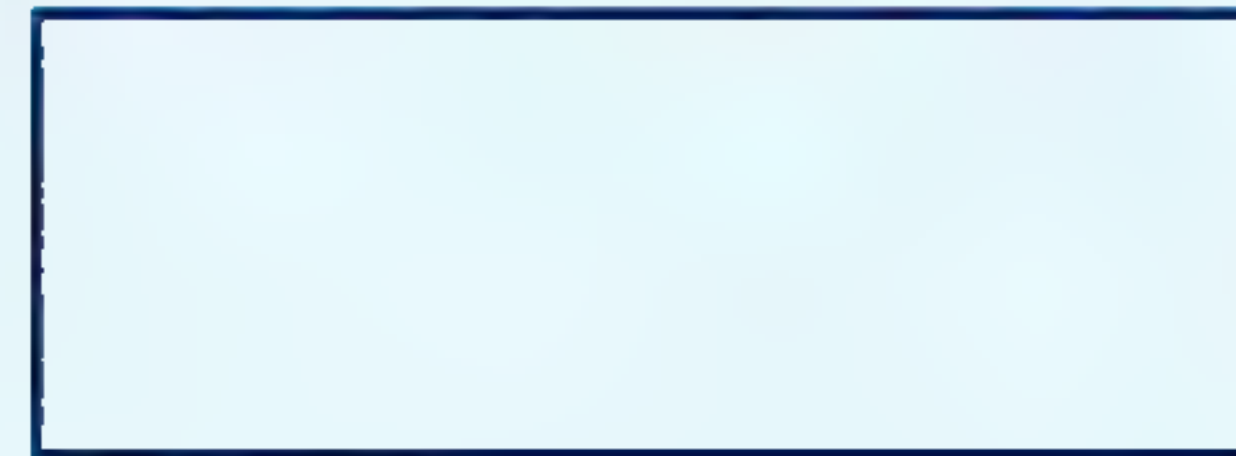
$$85 \div 4$$



$$85 \div 4 = \dots\dots\dots R \dots\dots\dots$$

②

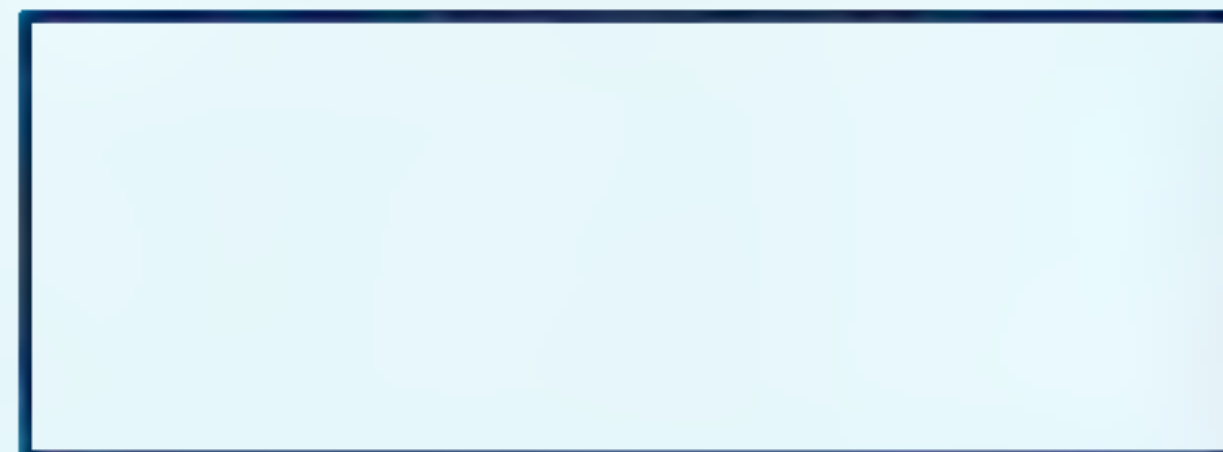
$$217 \div 5$$



$$217 \div 5 = \dots\dots\dots R \dots\dots\dots$$

③

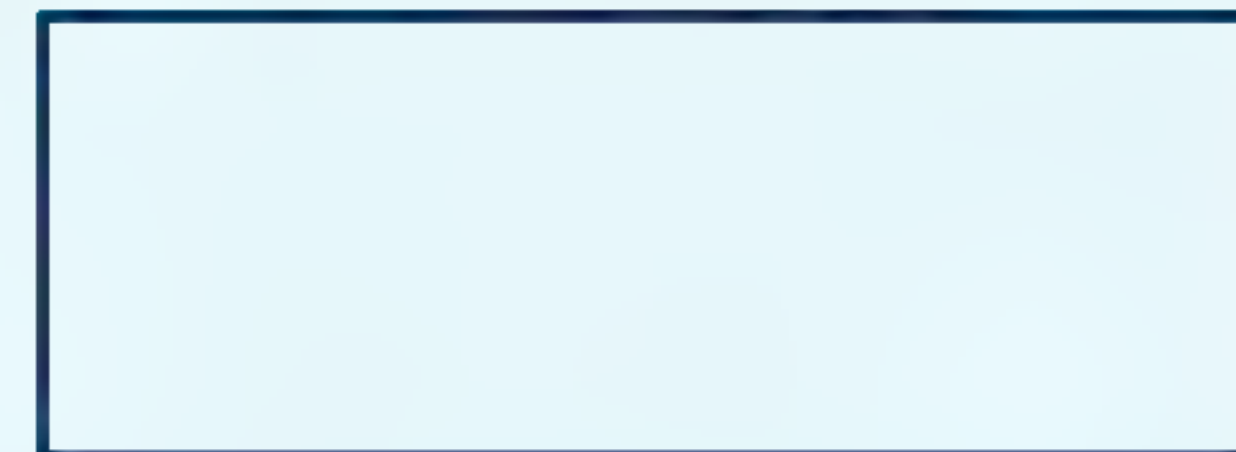
$$553 \div 5$$



$$553 \div 5 = \dots\dots\dots R \dots\dots\dots$$

④

$$427 \div 6$$

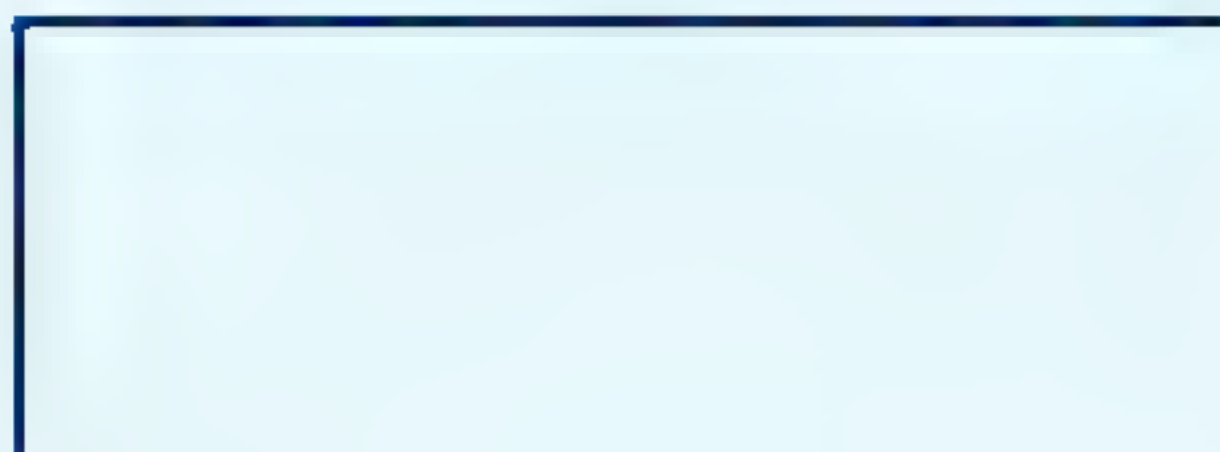


$$427 \div 6 = \dots\dots\dots R \dots\dots\dots$$

Exercise Use the area model to solve :

①

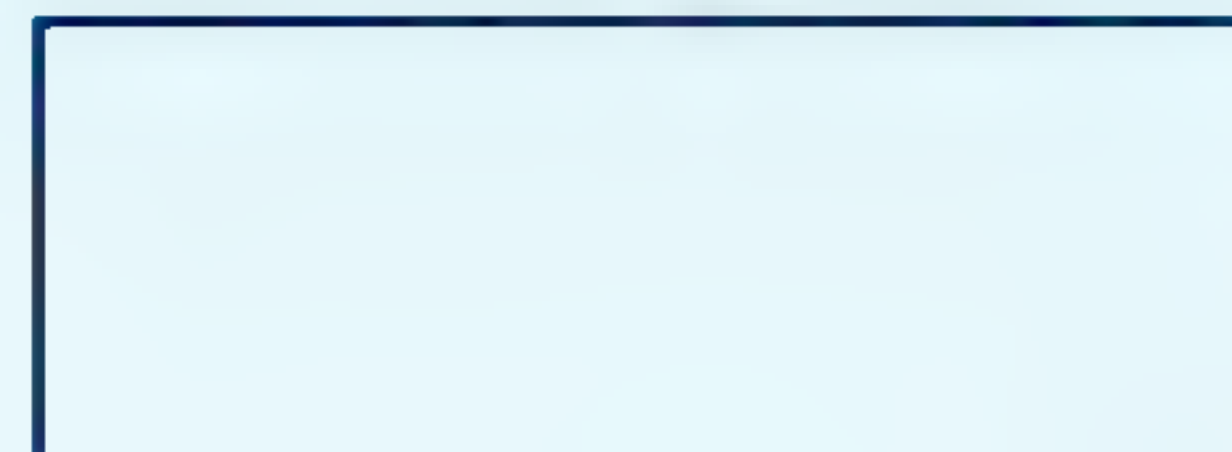
$$78 \div 6$$



$$78 \div 6 = \dots\dots\dots R \dots\dots\dots$$

②

$$139 \div 9$$



$$139 \div 9 = \dots\dots\dots R \dots\dots\dots$$





## lesson 8

## ⑦ The Partial Quotient Algorithm

## Learn

We can use The Partial Quotient Algorithm to find  $98 \div 4$  as following

① divisor 4, dividend 98

②  $4 \times 20 = 80$

③  $4 \times 4 = 16$

④  $4 \times 2 = 8$ , remainder 2

Then  $98 \div 4 = 24 \text{ R}2$

## Ex① :Divide

## Notes

- Always the remainder must be less than the divisor.
- The dividend = divisor  $\times$  quotient + remainder

①  $76 \div 4 = \dots\dots$     ②  $678 \div 6 = \dots\dots$     ③  $8,785 \div 7 = \dots\dots$     ④  $310 \div 8 = \dots\dots$

## Exercise Divide

①  $83 \div 5 = \dots\dots$     ②  $475 \div 4 = \dots\dots$     ③  $5,649 \div 4 = \dots\dots$     ④  $935 \div 8 = \dots\dots$





## Lesson 9

## ⑦ The Standard Division Algorithm

## Learn

## MATH IDEA

The order of division is as follows:

- ① Divide      ② Multiply      ③ Subtract      ④ Bring down

Repeat this order until the division is complete.

①  $98 \div 4 = \dots\dots$

2 divide

4  $\overline{) 98}$

②  $98 \div 4 = \dots\dots$

2 Multiply

4  $\overline{) 98}$   
8

③  $98 \div 4 = \dots\dots$

2 Subtract

4  $\overline{) 98}$   
- 8  
1

④  $98 \div 4 = 24 \text{ R}2$

24 Bring down

4  $\overline{) 98}$   
- 8  
18  
- 16  
2

2 Repeat

remainder

## Ex① : Divide

①  $93 \div 4 = \dots\dots$

--	--

②  $148 \div 6 = \dots\dots$

--	--

③  $283 \div 7 = \dots\dots$

--	--

④  $1,423 \div 7 = \dots\dots$

--	--

⑤  $8,534 \div 4 = \dots\dots$

--	--

⑥  $5,452 \div 5 = \dots\dots$

--	--





**Exercise** Divide using The Standard Division Algorithm

①  $1,423 \div 5 = \dots\dots\dots$

②  $8,534 \div 6 = \dots\dots\dots$

③  $5,430 \div 5 = \dots\dots\dots$

**Story Problems**

you can use your favorite strategy

- ① If you had 52 sandwiches to put into 4 lunch boxes. ,how many sandwiches would be put into each box if you divided them equally?

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- ② There are 154 tourists divided into equal groups. If each group has 7 tourists, how many groups will there be?

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أنت تسوق حافلة بداخلها 10 أشخاص، عند الوصول الى المحطة الأولى نزل أربعة أشخاص و صعد ثلاثة ، عند الوصول الى المحطة الثانية نزل خمس اشخاص و صعد ستة : في المحطة الثالثة نزل 3 و صعد 4 أشخاص. السؤال هو : كم عمر سائق الحافلة!!؟





## Home Work

27

Divide using your favorite strategy :

①

$98 \div 7 = \dots\dots\dots$

②

$143 \div 6 = \dots\dots\dots$

③

$418 \div 5 = \dots\dots\dots$

④

$67 \div 4 = \dots\dots\dots$

⑤

$4,253 \div 7 = \dots\dots\dots$

⑥

$2,108 \div 3 = \dots\dots\dots$

⑦

$67 \div 4 = \dots\dots\dots$

⑧

$4,253 \div 7 = \dots\dots\dots$

⑨

$2,108 \div 3 = \dots\dots\dots$





## lesson 10

## ⑩ Division and Multiplication

**Exercise** Estimate the result

If we want to divide  $584 \div 4$  we can Estimate the quotient by 2 facts

584 is between 400 and 800 so,

Fact 1 :  $400 \div 4 = 100$

Fact 2 :  $800 \div 4 = 200$

So, the quotient between 100 and 200

Ex① : Complete :

- ① if the problem  $345 \div 2$  , the quotient between ..... and .....
- ② if the problem  $685 \div 5$  , the quotient between ..... and .....
- ③ if the problem  $1,735 \div 7$  , the quotient between ..... and .....
- ④ if the problem  $2,378 \div 4$  , the quotient between ..... and .....
- ⑤ if the problem  $7,536 \div 2$  , the quotient between ..... and .....
- ⑥ if the problem  $38,475 \div 7$  , the quotient between ..... and .....

**Exercise** Complete :

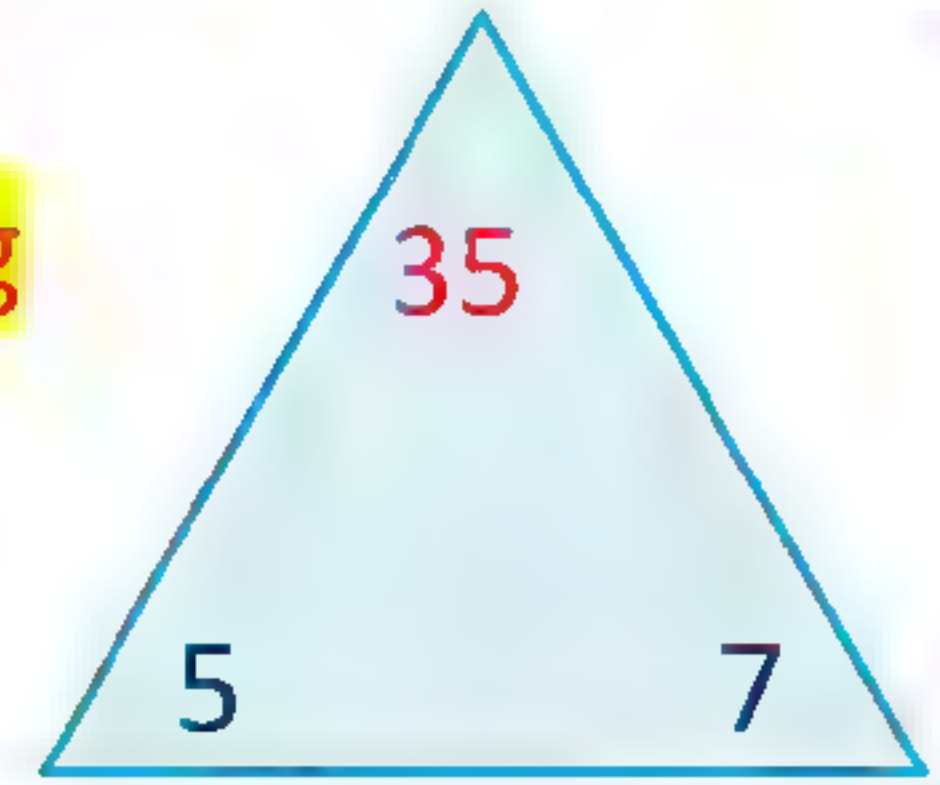
- ① if the problem  $752 \div 2$  , the quotient between ..... and .....
- ② if the problem  $785 \div 3$  , the quotient between ..... and .....
- ③ if the problem  $9,735 \div 4$  , the quotient between ..... and .....
- ④ if the problem  $7,378 \div 5$  , the quotient between ..... and .....
- ⑤ if the problem  $8,520 \div 3$  , the quotient between ..... and .....
- ⑥ if the problem  $445 \div 8$  , the quotient between ..... and .....





**Learn** Relation between division and multiplying

⊙ The division equation that matches  $5 \times 7 = 35$   
is  $35 \div 5 = 7$



- ① The division equation that matches  $3 \times 15 = 45$  is .....
- ② The division equation that matches  $2 \times 34 = 86$  is .....
- ③ The division equation that matches  $3 \times 518 = 1,554$  is .....
- ④ The division equation that matches  $2 \times 18 = 36$  is .....
- ⑤ The division equation that matches  $5 \times 15 = 75$  is .....
- ⑥ The division equation that matches  $6 \times 24 = 144$  is .....

**Exercise** Complete :

- ① The division equation that matches  $14 \times 2 = 28$  is .....
- ② The division equation that matches  $7 \times 105 = 735$  is .....
- ③ The division equation that matches  $6 \times 320 = 1,920$  is .....
- ④ The division equation that matches  $6 \times 27 = 162$  is .....
- ⑤ The division equation that matches  $5 \times 25 = 125$  is .....
- ⑥ The division equation that matches  $4 \times 24 = 96$  is .....
- ⑦ The division equation that matches  $9 \times 15 = 135$  is .....
- ⑧ The division equation that matches  $4 \times 38 = 152$  is .....
- ⑨ The division equation that matches  $4 \times 38 = 152$  is .....
- ⑩ The division equation that matches  $4 \times 38 = 152$  is .....





## Home Work

15

## ① Complete :

- ① The division equation that matches  $19 \times 2 = 38$  is .....
- ② The division equation that matches  $3 \times 105 = 315$  is .....
- ③ The division equation that matches  $6 \times 140 = 840$  is .....
- ④ The division equation that matches  $3 \times 27 = 81$  is .....
- ⑤ The division equation that matches  $5 \times 35 = 175$  is .....
- ⑥ The division equation that matches  $4 \times 29 = 116$  is .....
- ⑦ The division equation that matches  $7 \times 15 = 105$  is .....
- ⑧ The division equation that matches  $8 \times 38 = 304$  is .....
- ⑨ The division equation that matches  $9 \times 38 = 342$  is .....
- ⑩ The division equation that matches  $4 \times 53 = 212$  is .....
- ⑪ if the problem  $345 \div 3$  , the quotient between ..... and .....
- ⑫ if the problem  $685 \div 2$  , the quotient between ..... and .....
- ⑬ if the problem  $1,735 \div 5$  , the quotient between ..... and .....
- ⑭ if the problem  $2,378 \div 5$  , the quotient between ..... and .....
- ⑮ if the problem  $7,536 \div 6$  , the quotient between ..... and .....



استخرج من الصورة  
أسماء (٤) أنبياء





## Unit 8

## lessons 1&amp;2

① Order of operation

② Order of operation and story problems



$$3 + 2 \times 5$$

$$3 + 10 = 13$$

$$3 + 2 \times 5$$

$$5 \times 5 = 25$$



Which answer is the correct ?

Salma's or Adam's

## Learn

## Order of operation

First

Second

Third

Multiply or divide from the left

 $\times$  or  $\div$ 

Addition or subtract from the left

 $+$  or  $-$ 

Ex Use the order of operation to find the result:

①

$[8 - 2] \times 6 =$

②

$5 + 10 \div 5 =$

③

$3 \times [4 + 6] =$

④

$6 - 4 \div 2 =$

⑤

$14 \div 7 \times 2 =$

⑥

$15 + 24 \div 8 \times 2 =$

⑦

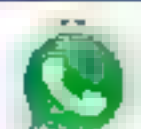
$1 + 6 \times 7 =$

⑧

$2 \times 5 - 8 \div 4 =$

⑨

$4 + 4 + 5 \times 10 =$





**Exercise** Use the order of operation to find the result:

①

$[4 + 8] \div 6 =$

②

$8 + 10 \div 2 =$

③

$6 \times [2 + 3] =$

④

$12 - 6 \div 3 =$

⑤

$24 \div 6 \times 2 =$

⑥

$6 + 12 \div 3 \times 2 =$

**Story Problems**

① Abdullah loves collecting stamps. He received 246 stamps for his birthday. He kept 25 of the stamps and now he wants to give the rest to 6 of his friends. How many stamps will each friend get if they share them equally?

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② Maha walked 14 kilometers every day for 2 weeks. The next week she walked 56 kilometers. How many kilometers did she walk over those 3 weeks?

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## Home Work

15

① Use the order of operation to find the result:

①  $3 + 2 \times 6 =$

②  $2 + 10 \times 3 =$

③  $3 \times [10 - 8] =$

④  $9 - 6 \div 3 =$

⑤  $18 \div 3 \times 2 =$

⑥  $6 + 15 \div 3 \times 3 =$

⑦  $5 + 2 \times 4 =$

⑧  $3 \times 6 - 8 \div 2 =$

⑨  $9 - 3 + 2 \times 3 =$

① Ali bought 3 books for 20 L.E each . if he had 100 L.E , How much money is left with Ali ?

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② Mona walked 20 kilometers every day for 3 weeks. The next week she walked 45 kilometers. How many kilometers did she walk over those 4 weeks?

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تم بحمد الله







# My little dictionary

[illegible][illegible]



# My Work Paper

Handwriting practice area with 20 horizontal dashed lines.





# My Work Paper

Handwriting practice area with 20 horizontal dashed lines.



01119062132

100

Almostafa in maths